A STUDY TO EVALUATE THE EFFECTIVENESS OF EFFLEURAGE IN REDUCING LABOUR PAIN PERCEPTION AMONG PARTURIENTS IN SELECTED HOSPITALS AT POLLACHI

COIMBATORE

A DISSERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILLMENT OF REQUIREMENT FOR THE DEGREE OF

MASTER OF SCIENCE IN NURSING

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CERTIFIED THAT THIS IS THE BONAFIDE WORK OF

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ANNAI MEENAKSHI COLLEGE OF NURSING,

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DEDICATION

My lord almighty for his blessings and guidelines

Throughout the study

Faith finds her path through

May a starless night

And without wonder, meets

The coming down –

With confidence she journeys

Towards the light

And as she goes, the darkness

Is withdrawn

Dedication is the expression of gratitude for the benefits enjoyed by the recipient from the donor.It is the recoginition of a benevolent act that acted as a suprime facilitator in the fruitiful birth of an action

I privillage to dedicate this dissertation to my loving husband Mr.V.A.Babu and my son Rohan Babu ,my parents Mr.M.Sundaran and Mrs.Sathi devi P.S and Sister Mrs.Sheema Vinod and My Brother

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LIST OF ABBREVIATION

- H - Hypotheses
- df - degree of freedom
- χ^2 - Chi Square
- SD - Standard Deviation
- MD - Mean Difference
- % - Percentage
- n - Frequency
- N - Total Number of Samples
- Contd - Continued
- > - Greater than
- < - Lesser than
- et.al - More than four Persons
- VAS - Visual Analogue Scale
- WHO - World Health Organisation
- UNICEF - United Nation International Children Emergency Fund

ABSTRACT

Childbirth is one of the most marvelous and memorable segment in a women's life. Even though delivery is a natural phenomenon, it has been demonstrated that the accompanying pain is considered severe or extreme in more than half of the cases.

The present study was done to evaluate the effectiveness of effleurage in reducing labour pain perception among parturients at selected hospitals in Pollachi. The aim of the study was to reduce labour pain perception by effleurage massage

The objectives of the study were:

- To assess the level of labour pain perception among parturients in experimental and control group.
- To evaluate the effectiveness of Effleurage in reducing the labour pain perception among parturients in experimental group.
- To determine the association between the level of labour pain perception among parturients with their selected demographic and obstetric variables in experimental and control group.

The research design adopted to the study was Quasi Experimental pre test post test control group design.The conceptual frame work for this study was based on Ludwig Von Bertanlaffy's theory (1968). The sample size was 60 parturients admitted for normal labour.

The standardized Visual Analogue Scale and interview schedule were used to assess the level of labour pain perception among parturients. The data tool was validated by experts and was found to be valid. The responses were analyzed through descriptive statistics and inferential statistics. The data related to demographic variables were analyzed by using descriptive measures. The effectiveness of effleurage massage was analyzed by dependent ’t’ test, independent‘ t’ test and chi square test. The obtained post mean‘t’ value was 14.41 which is significant at $p<0.05$ level. The findings of the study revealed that the effleurage massage was effective in reducing labour pain perception among parturients.

Key words: Effleurage , Labour pain Perception, Parturients.

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INTRODUCTION

CHAPTER I

INTRODUCTION

Is misty, God is a Generator,

That's why he generated an equivalent person to him

She is none other than the MOTHER"

Nature has designed labour and birth simply and elegantly. Although every labour and birth is unique, the process is remarkably and beautifully constant. Labour is divided into "stages" and "phases". This is simply a way to describe the typical changes that occur as labour progresses. Labour is a physiologic process during which the products of conception (ie, the fetus, membranes, umbilical cord, and placenta) are expelled outside of the uterus. Labour is achieved with changes in the biochemical connective tissue and with gradual effacement and dilatation of the uterine cervix as a result of rhythmic uterine contractions of sufficient frequency, intensity, and duration.

Labour is an exciting, anxiety provoking experience to a women and labour pain is the most painful event in the lives of women. Pain is universal experience and it is personnel, unpleasant and subjective sensation caused by stimulation of specialized nerve endings. It begin with regular uterine contraction, continues with hours of hard work and ends as the women and her family begins the attachment process with their new born.

Though delivery is a natural phenomenon, the pain accompanied during labour is severe and extreme in many of the cases. For several decades, child birth educators

have focused on the alleviation or reduction of pain and suffering during the child birth experience. The management of labour pain is a major goal of intrapartum care.

Besides much pharmacological approach like epidural analgesia, many complementary and alternative methods are reported to reduce pain during labour and delivery. There are two general approaches: pharmacologic and non pharmacologic. Pharmacologic approaches are directed at eliminating the physical sensation of labour pain, whereas non pharmacologic approaches are largely directed at prevention of suffering.

The term labour support' refers to continuous non-pharmacological care of a labouring woman. A wide variety of non pharmacology pain relief measures are available for effective management of labour pain. It includes physical comforting such as touching, massaging, bathing, grooming, applying warmth or cold and emotional support such as continuous companion, reassurance, encouragement, anticipatory guidance, information provision, and non-medical advice.

Massage has been found to be an effective therapy to decrease pain, anxiety, agitation and a depressed mood during labour. In addition to this they reported that massaged mother, had significantly shorter labour, a shorter hospital stay and less postpartum depression (Field et.al., 2004)

Massage is the intentional and systemic manipulation of the soft tissue of the body to enhance health and which can be used during labour to enhance relaxation and reduce pain and suffering. Massage helps to ease pain and reduce anxiety in the

first stage of labour. It is also linked with shorter labours and a lower risk of postnatal depression. It has been shown that the adrenaline that is released during times of stress works against the contraction inducing hormone oxytocin. The caring touch of massage can help to experience changing body in a positive accepting way. Massage therapy plays an important role in reducing pain perception during labour.

Among the wide variety of non pharmacological pain relief methods effleurage massage is found to be more effective in reducing labour pain perception in majority of cases. Effleurage is a light pressure applied over a wide area of the body. Light effleurage promotes relaxation, alleviates pain and encourage sleep. Relaxed muscle short circuit the fear and tension. It helps the mother to labour with less pain perception.

It is important to remember that lack of emotional support and excessive medical intervention in the care of parturient women are factors that may be related to increased intensity of pain and little or nothing is offered for its relief. The professionals must be prepared and aware of the humanistic dimension scope.

Intervention to reduce pain and discomfort during labour and birth is a major part of modern obstetric care of laboring women. It is important for midwives to explore various strategies for diminishing or managing the pain caused by labour and birth. Many strategies may be adopted to alleviate pain and a major responsibility of the midwife is promoting and using non pharmacological techniques to minimize labour pain.

Need for the Study

Labour and birth is physically and emotionally straining for a women. Child birth has been associated with pain. During labor process occurrence of labor pain is always accompanied with low back pain. Pain during labor is caused primarily by uterine muscle contractions and somewhat by pressure on the cervix. The pain manifests itself as cramping in the abdomen, groin, and back (low back pain) as well as tired, achy feeling all over. Other causes of pain during labor include pressure on the bladder and bowels by the baby's head and stretching of the birth canal and vagina. Throughout the labor process measures had been introduced to help relieve the pain. Various exorcisms can be found in the records from the ancient civilizations. At the beginning of the 19th century other remedies were introduced. Some methods support the natural physiological responses to labor pain the release of endogenous opiods and the gate mechanism.

According to WHO worldwide every minute of every day a women dies somewhere in the world as a result of pregnancy or child birth globally, this is more than half a million women a year worldwide.

According to UNICEF, every year 78,000/1,00,000 mothers die during child birth in India. According to UNICEF, India's maternal mortality rate stands at 450 per 1,00,000 live births. Against 540 in 1998-1999, India's millennium development goal is to reduce the maternal mortality rate below to 109 by the year 2015.

According to WHO maternal death worldwide is 25%.<1% Maternal death in more developed regions and 90% in developing countries.13% countries account for

67% of all maternal deaths. Highest estimated number are India, Nigeria, Pakistan, Democratic republic of Congo, Ethiopia, The united republic of Tanzania, Afghanistan, Bangladesh, Angola, China, Kenya, Indonesia and Uganda.

Geller in 2006 surveyed that in addition to maternal mortality, 7 million more women suffer serious health problems related to child bearing and 50 million suffer adverse health effects.

In Tamil Nadu, from the year 2001 to 2003 maternal mortality was 130 per 1,00,000, in the year 2007 to 2008 maternal mortality was 91 per 1,00,000 and in the year 2009 maternal mortality was 79 per 1,00,000. Global maternal mortality estimated to 400/1,00,000 live birth.

Nonpharmacological methods of pain relief such as labor support, and massage are effective techniques for management of labor pain. An increased availability of these methods can provide effective alternatives for women in labour. It helps to reduce various postpartum complications and reduces maternal mortality rate.

Before western medical practices displaced traditional midwifery, the touch and massage of a midwife or birth attendant was a central component of prenatal care around the world. In the absence of obstetrical tools and gadgets, a mid wife had her eyes, ears and hands to diagnose and assists pregnant women. By constant practice the midwife's senses of observation and intuition were finely tuned. Today traditional

healers and midwife skillfully integrate the ancient healing arts of massage and midwifery, as they have for thousands of years.

Effleurage therapy is a comprehensive intervention involving a range of techniques to manipulate the soft tissues and joints of the body. The purpose of therapy is to prevent, develop, maintain, rehabilitate or augment physical utilization of therapy in Canada is estimated to be 17-23% of the population and 35% of the population has used massage therapy in the past two years. Massage therapy is increasingly viewed as a useful adjunct to conventional medical treatment in a variety of populations.

According to National Health Interview Survey (2007) , which included a comprehensive survey shows that, 90% of the labour mothers, who receive effleurage therapy perceives less pain perception during labour.

Jennie Luther at Chennai (2006) conducted a randomized trial to show effectiveness of massage during pregnancy. Women who received massage therapy reported decreased depression, anxiety, and leg and back pain. Cortisol levels decreased and in turn, excessive fetal activity decreased, and the rate of prematurity was lower in the massage group. In a study of labor pain, women who received massage therapy experienced significantly less pain, and their labors were on average 3 hours shorter with less need for medication.

Kiaus, Kennel and Klaus, (2005) states that a therapeutic touch (massage and loving touch) during labour reduces anxiety in mothers and decreased their perceived level of labour pain.

Although non pharmacologic methods can be effective in helping patients relax during labour, few well controlled studies demonstrate that these methods actually reduce perceived pain. “Massage, is an oldest technique utilized in labour is thought to work either by blocking pain impulses to the brain by increasing, A- fiber transmission or by stimulate the local release of endorphins”. (Mc caffery and Beebe, 2004).

Several studies done on massage therapy during labour reported about its effectiveness on labour pain. The clinical experience of the investigator, discussion with expert and the literature evidences motivated the investigator to take up this study, so that in turn it can be apply in the clinical practice and make the childbirth experience for every woman a positive experience, avoiding negative impressions, which may give rise to psychological sequel with implication for the family.

A Nurse –Midwife is the ideal person to assist a woman in this crucial hour of childbirth, combining her professional knowledge and skills with abundant humanity and one of such helping strategy in providing back massage to the gravid woman during labour contractions. Thus the present study was undertaken, to assess the effectiveness of effleurage in reducing labour pain perception among parturients during labour.

Statement of the Problem

A Study to Evaluate the Effectiveness of Effleurage in Reducing Labour Pain Perception among Parturients in Selected Hospitals at Pollachi.

Objectives

- To assess the level of labour pain perception among parturients in experimental and control group.
- To evaluate the effectiveness of effleurage in reducing the labour pain perception among parturients in experimental group.
- To determine the association between the level of labour pain perception among parturients with their selected demographic and obstetric variables in experimental and control group.

Hypotheses

H1: There will be a significant difference between the mean pre and post test level of labour pain perception among parturients in experimental group

H2 : There will be a significant difference between the mean pre and post test level of labour pain perception among parturients in control group.

H3 : There will be a significant difference between the mean post- test level of labour pain perception among parturients in experimental and control group.

H4 : There will be a significant association between the level of labour pain

perception among partuients with their selected demographic and obstetric variables in experimental and control group.

Operational Definitions

Effectiveness

Effectiveness refers to the extent to which the lower back massage had its impact on the pain tolerance ability of women in labour as measured by Visual Analogue Scale.

Effleurage

Effleurage is a light pressure applied over lumbo sacral region to alleviate the pain perception in labour .

Labour Pain Perception

Labour pain perception refers to the feeling of distress , suffering or agony, caused by stimulation of specialized nerve endings, which is assessed by visual analogue scale.

Parturients

Mother who are in active phase of labour.

Assumption

- Effleurage may have an effect on labour pain perception in parturients.
- Effleurage has no adverse effect on parturients.

- Effleurage is a simple measure to implement physical and mental relaxation.
- Effleurage is a simple measure to reduce labour pain perception during Labour.

Delimitations

- The study is limited to the parturients those who are in active phase of labour.
- The study is limited to parturients admitted in a selective hospitals at pollachi.

Projected Outcomes

- The study will enable the investigator to identify the effectiveness of pain perception among parturients.
- The finding of the study will help the nurses to identify the effectiveness of Effleurage therapy in reducing the labour pain perception among parturients.
- The study findings will help the nurses to understand its importance and provide an opportunity to practice effleurage massage among the mothers, during labour pain.

REVIEW OF LITERATURE

CHAPTER II

REVIEW OF LITERATURE

The Review of literature in a research report is a summary of current knowledge about particular practice, problem and includes what is known and not known about this problem. A literature review is an organized writer's presentation of what has been published on a topic by the scholars. The task of reviewing literature involves the identification, selection, critical analysis and reporting of existing information on the topic of interest.

Review of literature was reviewed and organized under following headings.

- Studies Related to Labour Pain Perception.
- Studies Related to Effectiveness of Effleurage on Pain Perception.
- Studies Related to Effectiveness of Effleurage on Labour Pain Perception.

Studies Related to Labour Pain Perception

Olayemi, et. al (2009) checked the effect of ethnicity on the perception of pain by parturients undergoing labor in a hospital. The outcome measure of pain perception was assessed by the Box Numerical Scale. The Yoruba ethnic group had scores lower than the mean scores for the other ethnic groups (t = −0.636). The presence of a doula reduced the mean BNS scores significantly during labour.
(t = −0.533). Increasing parity also reduced pain (t = −0.182) as well as increasing educational attainment increased pain scores in labour (t = 0.189). It is concluded

that, the ethnicity of the parturient relative to that of the predominant ethnicity in the place of birth has a significant effect on the perception of labor pain by the parturient.

Tzeng Y.L et.al., (2008) conducted a quantitative study among Taiwan women about low backpain to describe the following characteristics of low back pain during labor. A co- relational designed with repeated measures was used to conduct this investigation. Ninety three low risk parturients were selected from a medical center . Low back pain was repeatedly measured during the latent phase (cervix dilated 2-4 cm), early active phase (cervix dilated 5-7 cm), and late active phase (cervix dilated 8-10 cm) of labor. The study findings revealed that in latent phase, early active phase and late active phase the pain perception of parturients were 40% , 50 %, and 75 % respectively.

MayA.E and Elton. C.D., (2007) conducted a prospective descriptive study on mother labor pain at Landon. Study was conducted over a period of 2 months. 100 primigravid mothers who had been admitted in hospital for delivery were selected by convenience sampling technique pain assessment was carried out by direct questioning method using a 4-point verbal rating scale of mild, moderate and severe in labor room during first stage and second stage. Data was analyzed by descriptive and inferential statistics. The results of the study reveals that the labor is a painful event for every women, 95% of the primigravid mothers experienced progressively increasing pain during first stage from mild to severe which is spasmodic and radiating in nature.

Asnat Walfisch (2007) conducted a prospective trial in USA to evaluate changes in pain threshold before and after labour. Forty pregnant women at term were included. Pain threshold in 18 specific pressure points was evaluated using a dolorimeter. Woman underwent pain threshold assessment at term before labor, during the active phase of labor and postpartum. Subjective pain intensity was assessed by the parturient using the Verbal Rating Scale (VRS). Pain threshold was significantly higher during active phase of labor. There was a significant decline in pain threshold after labor as compared to pain threshold during labour .The result shows that the pain intensity using the VRS score was higher during labor than before labour.

Molina F.J. et.al., (2006) conducted a quantitative study in Braziel to evaluate the relationship between the parturient's position and her lumbar pain during the labor. Sample size consists of homogenous group of 100 parturients was randomly in horizontal or the vertical position for 15-min and the pain was measured at 2–3, 4–5, 6–7, and8–9 centimeters dilatation. To avoid "carry over" effect, these positions were preceded by a self-elected posture. Pain intensity was measured by using the Argentine Pain Questionnaire's Present Pain intensity and the Huskisson's visual analogue scale. The analysis revealed that a majority of parturients felt less abdominal and lumbar pain, either continuous or due to contractions, during recumbence. The effect was more remarkable when dilation exceeded 5 centimeters and less intense during the first half of the first stage of labor.

Wijma, et. al (2005) conducted a comparative study on the labour pain among 60 primi para and multipara women during first stage of labour in Linkoping

University, Sweden. 30 primi parous and 30 multiparous women were selected for the study by using random selection method. Collection of the data was done by Verbal Rating Scale (VRS) . Analyzation of the data was done by mean, SD and t-test. The result of the study revealed that primi para women reported higher level of pain than multiparous women ($t = 0.735$, $p = 0.01$).

Yarrow (2004) conducted a descriptive-comparative study to explore selected aspects of labor stress and the relationship between environmental factors and pain perception among parturients. In this study, 300 primi parous and 300multiparous women who were candidates for vaginal delivery, were randomly selected and interviewed. The data were collected by a questionnaire and the intensity of pain was determined by Visual Analogue Scale (VAS). The result revealed significant positive correlations between pain and tension from environmental factors in primiparous ($r=0.16$, $p<0.01$) and in multiparous ($r=0.22$, $p<0.05$) women.

Studies Related to Effectiveness of Effleurage on Pain Perception

Pope MH, el.al (2005) conducted a randomized controlled compared comprehensive effleurage therapy, 2 components of massage therapy and placebo in the treatment of subacute low-back pain. Subjects with low-back pain were randomly assigned to 1 of 4 groups: comprehensive massage therapy ($n = 25$), soft-tissue manipulation only ($n = 25$), remedial exercise with posture education only ($n = 22$) or a placebo of sham laser therapy ($n = 26$). Outcome measures obtained at baseline, after treatment and at 1-month follow-up consisted of the Roland Disability Questionnaire (RDQ), the McGill Pain Questionnaire (PPI and PRI), the State Anxiety Index and the Modified Schober test (lumbar range of motion).Of the 107

subjects who passed screening, 98 (92%) completed post treatment tests and 91 (85%) completed follow-up tests. Statistically significant differences were noted after treatment and at follow-up. The comprehensive massage therapy group had improved function (mean RDQ score 1.54 v. 2.86-6.5, $p < 0.001$), less intense pain (mean PPI score 0.42 v. 1.18-1.75, $p < 0.001$) and a decrease in the quality of pain (mean PRI score 2.29 v. 4.55-7.71, $p = 0.006$) compared with the other 3 groups. Clinical significance was evident for the comprehensive effleurage massage therapy group and the soft-tissue manipulation group on the measure of function. At 1-month follow-up 63% of subjects in the comprehensive massage therapy group reported no pain as compared with 27% of the soft-tissue manipulation group, 14% of the remedial exercise group and 0% of the sham laser therapy group. This study concluded that massage therapy is most effective to reduce the pain.

Ferrell-Torry AT, et.al (2004) conducted a quantitative study to examine the effects of therapeutic massage (consisting of effleurage, petrissage, and myofascial trigger point therapy) on pain perception, anxiety, and relaxation levels in hospitalized patients experiencing significant cancer pain. Thirty minutes of therapeutic massage was administered on two consecutive evenings to nine hospitalized males diagnosed with cancer and experiencing cancer pain. The subjects' self-reports of pain and relaxation (measured by Visual Analogue Scales) as well as anxiety(measured by the Spielberger State Anxiety Inventory) were recorded before and immediately after the intervention. The objective physiologic measures of heart rate, respiratory rate, and blood pressure were obtained before, immediately after, and, finally, 10 min after the massage intervention. Massage therapy significantly reduced the subjects' level of pain perception (average = 60%) and anxiety (average = 24%) while enhancing their

feelings of relaxation by an average of 58%. In addition to these subjective measures, all physiological measures (heart rate, respiratory rate, and blood pressure) tended to decrease from baseline, providing further indication of relaxation. In conclusion, although the exact mechanism is not known, therapeutic massage is a beneficial nursing intervention that promotes relaxation and alleviates the perception of pain and anxiety in hospitalized cancer patients.

Field T. et.al (2004) who had conducted a study regarding effleurage massage therapy effects on depressed pregnant women. Eighty-four pregnant women recruited during the second trimester of pregnancy and randomly assigned to a massage group, a progressive muscle relaxation group or a control group that received standard prenatal care alone. These groups were compared to each other and to a non depressed group at the end of pregnancy. The massage group received two 20 minutes therapy sessions by their significant others each weeks for sixteen weeks of pregnancy, starting during the second trimester. The relaxation group provided themselves with the progressive muscle relaxation sessions on the same time schedule. Immediately after the massage therapy sessions on the first and last days of the 16- week period the women reported lower levels of anxiety and depressed mood and less leg and back pain. By the end of the study the effleurage massage group had higher dopamine and serotonine levels and lower levels of cortisol and nor epinephrine. These changes may have contributed to the reduced fetal activity and better neonatal outcome for the massage group. The data suggest that depressed pregnant women and their offspring can benefit from massage therapy.

Manuel Arroyo-Morales et.al (2004) conducted a prospective randomized study to evaluate the effect of effleurage massage on neuromuscular recruitment, mood state, and mechanical nociceptive threshold after high-intensity exercise. The study was conducted at a university-based sports medicine clinic. Sixty-two (62) healthy active students age 18–26 participated. Participants, randomized into two groups, performed three 30-second Wingate tests and immediately received whole-body massage treatment. The duration (40 minutes), position, and therapist were the same for both treatments. Dependent variables were surface electromyography of quadriceps, profile of mood states and mechanical nociceptive threshold of trapezius and masseter muscles. These data were assessed at baseline and after exercise and recovery periods. Generalized estimating equations models were performed on dependent variables to assess differences between groups. Significant differences were found in effects of treatment on SEMG of Vastus Medialis and vigor subscale. After the recovery period, there was a significant decrease in electromyography. activity of in the myofascial-release group versus a no significant increase in the placebo group , and a decrease in vigor in the massage group versus no change in the placebo group . Massage reduces EMG amplitude and vigor when applied as a passive recovery technique after a high-intensity exercise protocol. Massage may induce a transient loss of muscle strength or a change in the muscle fiber tension–length relationship, influenced by alterations of muscle function and a psychological state of relaxation.

Elisabet Stener-Victorin et.al (2004) conducted a study aimed to describe the experience of massage for breast cancer patients during chemotherapy treatment. Ten patients received effleurage massage at five occasions. They were interviewed and

analysis was conducted using Giorgi's ideas of phenomenological research. The essential meaning of getting effleurage massage during chemotherapy was described as a retreat from the feeling of uneasiness toward chemotherapy. Results revealed five themes: the patients experienced distraction from the frightening experience, a turn from negative to positive, a sense of relaxation, a confirmation of caring, and finally they just felt good. The findings of this study show that effleurage massage offered a retreat from uneasy, unwanted, negative feelings connected with chemotherapy treatment.

Esther Mok (2004) conducted an experimental qualitative design to explores the effect of slow-stroke back massages(effleurage) on anxiety and shoulder pain in hospitalized elderly patients with stroke and comparing the scores for self-reported pain, anxiety, blood pressure, heart rate and pain of two groups of patients before and immediately after, and three days after the intervention. The intervention consisted of ten minutes of slow-stroke back massage for seven consecutive evenings. One hundred and two patients participated in the entire study and were randomly assigned to a massage group or a control group. The results revealed that the effleurage massage intervention significantly reduced the patients' levels of pain perception and anxiety.

Studies Related to Effleurage on Labour Pain Perception

Rekha M., (2010) conducted a study on effectiveness of effleurage massage for the reduction of labor pain among intranatal women in a selected hospital . The research design adopted for this study was pre test and post test design with control group. The sample consisted of 40 intranatal mothers. Purposive sampling technique

was used to select the subjects. The subjects in control group did not receive any treatment whereas in experimental group the massage was started when contraction commenced and stopped when it ended and restarted when next contraction began. The mean post test pain score of the subjects were 2.1, which was significantly lower than the mean pre test pain score 5.0. The calculated value 11.588 was more than the table value 2.093, $P<0.05$ at 0.05 level of significance. The study findings revealed that the effleurage massage was effective in the experimental group.

Taghinejad H, et.al (2010) conducted a comparative study between massage and music therapies to relieve the severity of labor pain. The sample size were 101 primigravidae who were hospitalized for vaginal delivery were recruited and randomly stratified into two groups of either massage (n = 51) or music (n = 50) therapies. Pain was measured using the visual analog scale and the two groups were compared in terms of pain severity before and after the interventions. The result revealed that the Mothers in the massage therapy group had a lower level of pain compared with those in the music therapy group ($p = 0.009$). A significant difference was observed between the two groups in terms of pain severity after intervention ($p =0.01$). Agonizing, or most severe, labor pain was significantly relieved after massage therapy ($p = 0.001$).

Brenda Lane et.al (2010) conducted a study to compare the effects of massage on the severity of labor pain perception in a hospital at Iran. Overall, 60 parturients who were hospitalized for vaginal delivery was randomly selected into two groups. Pain was measured using the numerical pain scale. The result of the study concluded that mothers in the massage therapy group had a lower level of labour pain

perception (p=0.001) when compared with those in the control group. In conclusion, massage therapy was an effective method for reducing and relieving labor pain perception and can be clinically recommended as an alternative, safe and affordable method of pain relief where using either pharmacological or non pharmacological methods are optional.

Jeyalakshmi,S.,(2008),conducted an experimental study to assess the effectiveness of effleurage massage therapy on low back pain of parturient mothers in the first stage of labour at Chennai. Pretest, post test design was used to achieve the effectiveness of the study. The sample size was 60 and they were selected at random of which 30 were assigned to control group and 30 were assigned to experimental group by systematic sampling technique. In the control group majority of the mothers experienced severe pain 90.0% before therapy and 100% of them experienced serve pain after therapy. In experimental group majority of the mothers experienced severe pain 93% before massage therapy and 100% of them experienced moderate pain after massage therapy. It was also found that none of the mothers experienced severe pain after effleurage massage therapy.

Waters BL et.al (2008) conducted an experimental study to reveals the use of massage in the meridian point of large intestine 4 (L14) to reduce labor pain during contractions. A one group pre test, post test design was chosen, which uses 100 mm Visual Analog Scales and the McGill Pain Questionnaire ranked numerically and verbally to measure pain levels; the pre test served as the control study participants were Hispanic and white Medicaid recipients who received prenatal create a women's clinic staffed by certified nurse midwives and obstetricians. Participants noted pain

reduction mean on the VAS of 28.22 mm on the left hand and 11.93 mm on the right hand. The post delivery ranked MPQ dropped from number 3 to number 2. The study result suggests that effleurage massage is a safe, non invasive, non pharmacological method of reducing labor pain.

Kimber L., et.al (2008) conducted a randomized trial on massage therapy for maternal pain and anxiety in labour. The sample size were 60 parturients admitted for vaginal delivery, 30 in experimental group and 30 in control group(usual care).Pain intensity was measured by a visual analogue scale before and after interventions .The study result revealed that the parturient who received massage therapy shows less pain perception than the other two category.

Naghshin et.al (2008) conducted a study to determine the effect of massage on labour pain perception. Participants of this clinical trial study were 60 pregnant women having the inclusion criteria. Participants were randomly divided in to two groups of thirty, each (control group= routine care and experimental group = effleurage massage). This procedure was done for thirty minutes. Labor pain of subjects was measured by visual analog scale beforehand after the procedure. Results showed that reduction of labour pain by effleurage massage was statistically significant .$P<0.001$)this method therefore applicable in labour rooms.

Behmanesh et.al (2007) done an experimental study to find out the effect of effleurage therapy on labor pain severity and delivery outcome in parturient women. In this study 64 nulliparous women were randomly divided in to 2 groups (Experimental and Control). The control group received routine care in obstetrics

ward and the experimental group receives massage intervention. The severity of pain was determined on dilatation of 3-4, 6-7 and 9-10 cm by Mc Gill pain questionnaire. Comparison of the two groups showed a significant decrease in the intensity (severity) of pain in the massage group in the first stage, and on dilatation of 6-7 cm and 9-10 cm, and in the second stage of labor. Also, in the massage therapy group duration of the first and third stages of labor decreased .

Davim R.M., (2007) conducted a descriptive study to evaluate the effectiveness of non pharmacological strategies (NFS) on pain relief of parturients. The tool used in the study was Analogous Visual Scale (AVS). 30 parturient attended at in the labor unit of a maternity hospital . Of the six NFS (respiratory exercises, muscular relaxation, Lumboscaral massage, shower washing, deambulation and pelvic swing), two were excluded post test (deambulation and pelvic swing) for not being accepted by parturients. Among this the lumboscaral massage were found to be effective in relieving pain of these parturients.

Mei-dan E., et.al. (2006) conducted a study to evaluate the effect of massage therapy on severity of labour pain perception and the samples were eighty primi mothers undergoing delivery in a selected hospital. They were divided into massage therapy and control groups, randomly. Severity of pain was measured in visual analogue scale (VAS) and the questionnaires were filled during first stage of labour. Effleurage massage therapy was used as intervention in experimental group, and routine care in control group. The results revealed that there is a significant difference in pain perception among the experiment group and the control group($t = 3.338$ $p <$

0.001), the mothers who received massage shows less labour pain perception than others.

Khoda Karami., et.al (2006), conducted a study to evaluate the effect of massage therapy on severity of labor pain. It is a clinical trial on sixty women undergoing delivery in selected hospitals . The cases were primiparous women with single fetus in the age range of 20 to 34 with cervical dilatation of four centimeters and less and gestational age of 38 to 42 weeks. They were divided into massage therapy and control groups, randomly. Severity of pain was measured in visual analogue scale (VAS) and the questionnaires were filled at the cervical dilatation of 4, 8 and 10 centimeters. Massage therapy was done using effleurage method as a type of Swedish massage technique. The results demonstrated that the mean of pain severity at the first stage of labor was significantly different between the experiment group and the control group, at the start of active phase (t= 0.009), end of transitional phase (t= 0.014) and end of the first stage (t=0.01). Also, the duration of the first stage of the labor was different in experiment and control group. The study result revealed that the massage therapy as a non-pharmacological intervention during delivery to reduce the labor pain and causes a decrease in the number of cesarean sections, done to avoid the fear and anxiety, induced by normal vaginal deliveries in young mothers.

Nabb, M.T., (2006), conducted a study to produce a detailed specification program on massage and controlled breathing taught to the partner. The partner visualized the program. Twenty-Five nulliparous and 10 multiparous women participated in the study from 36 weeks of gestation and assisted by a trained professional, following hospital admission during labour and birth. The mean score

was 6.6. Previous studies suggest that a reduction from 8.5 to 7.5 would significantly reduce pharmacological analgesia in labour.The study result revealed that Program on massage and controlled breathing was effective in controlling pain during labour.

Jayabharathi.B (2006) conducted a true experimental study to assess the effectiveness of selected effleurage on labour perception during first stage of labor. Among primi mothers 60 were selected from various hospitals. The tool used for statistical analyses in the study was numerical scale. The data analyzation was done by descriptive and inferential statistics, the post-test mean value was 3.33 and SD 1.86 of experimental group and mean value of 5.64 and SD 2.59 of control group projected the 't' value of 4.384. $P<0.001$ According to the findings of the study, the investigator found that rendering selected nursing interventions like effleurage massage enhance the reduction of labour pain perception.

Mei-Yueh Chang,(2005), conducted a study on effectiveness of effleurage massage on pain and anxiety during labour. A randomized controlled study was conducted between Sixty primiparous women expected to have a normal childbirth at a regional hospital were randomly assigned to either theexperimental (n=30) or the control (n=30) group. The experimental group received massage intervention whereas the control group did not. The nurse-rated present behavioral intensity (PBI) was used as a measure of labour pain. Anxiety was measured with the visual analogue scale for anxiety (VASA). The intensity of pain and anxiety between the two groups was compared in the latent phase(cervix dilated 3-4 cm), active phase (5-7 cm) and transitional phase (8-10 cm).Result showed that in both groups there was a relatively steady increase in pain intensity and anxiety level as labour progressed. The result

revealed that massage is cost-effective nursing interventions that can decrease pain and anxiety during labour, and partners' participation in massage can positively influence the quality of women's birth experiences.

CONCEPTUAL FRAME WORK

The conceptual framework is a group of related ideas, statements or concepts. The term conceptual model is often used interchangeably with conceptual framework and sometimes with grand theories those that articulate abroad range of the significant relationship among the concepts of a discipline, Kozeir Barbar,(2005).

The conceptual framework for this study was derived from general system given by Ludwig Von Bertanlaffy's(1968). According to this theory, a system is a set of components or units interacting with each other within a boundary that filters the type and rate of exchange with the environment. All living systems are open in that there is a continual exchange of matters, energy and information. In open system, there are varying degree of interaction within the environment from which the system receives input and gives back output in the form of matter, energy and information.

The present study aims at evaluating the effectiveness of Effleurage in reducing labour pain perception among parturients.

General system theory is useful in breaking the whole process in to sequential tasks to ensure goal realization. Betalanffy explained that the system has three major aspects are

Input

Through put

Output

Input

Input is any form of energy, information, material or human that enters into the system through its boundaries. Though the process of selection the system regulates the type and amount of Input received.

In this study, the input consists of demographic variables such as age, education, occupation , family income and type of family.

Through put

It is the process that occurs between the input and output, which enables the input to be transformed as output in such a way that can be readily used by the system.

The through put consists of providing effleurage massage during active phase of labour among parturients. It includes the process of post test to evaluate the mothers. After processing the input, the systems output to the environment is in an altered state.

Output

It is any energy information and material that is transferred to the environment. After processing the input, the system's output to the environment is in an altered state.

The outcome of effleurage massage is evaluated by Visual analogue scale. After post test, the improved pain score gained by the experimental group comparing to control group mothers. It indicates the effectiveness of effleurage massage during the active phase of labour.

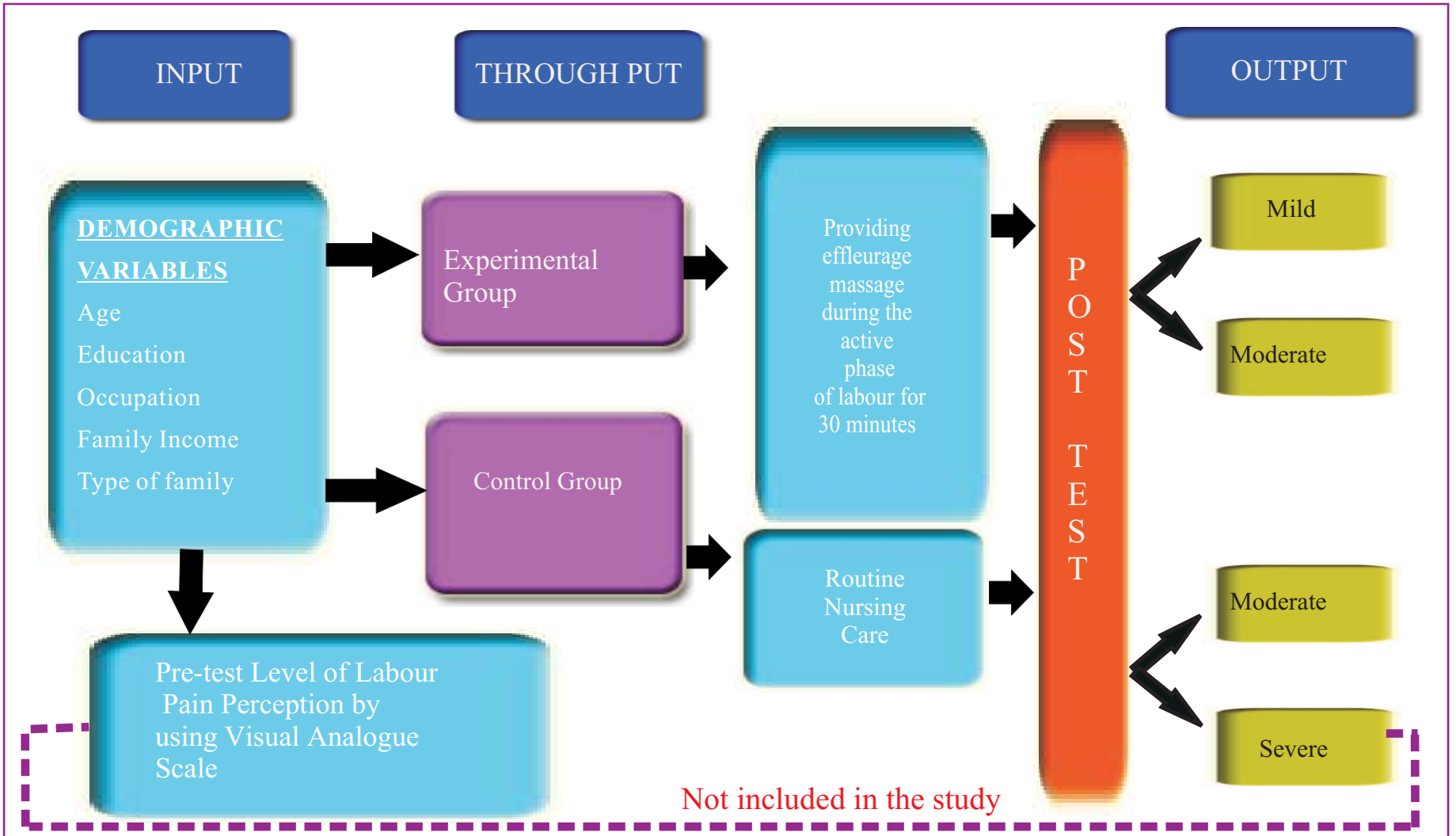


FIG:1.Conceptual Framework based on modified Ludwig Von Bertanlaffy's (1968)

METHODOLOGY

CHAPTER III

METHODOLOGY

Research methodology is the way of solving the problem. It explains the various steps that are generally adopted by the researcher in studying the research problem along with the logic behind.

The chapter deals with the methodological approach adopted for the study. It includes research approach, research design, setting of content validity of tool, pilot study data collection process an plan for data analysis.

Research Approach

A quantitative approach was used for analyzing the effectiveness of massage on level of labour pain perception among parturients.

Research Design

Nancy Burns, Susan.K.Groove, (2005) defined research design as a blue print for understanding the study that maximizes the control over factors that could interfere with the validity of the findings. The research design guides the researcher in planning and implementing in a way that is most likely to achieve the intend goal.

A Quasi experimental pretest - post test with control group design was chosen for this study. Assessment was made before and after the intervention (Effleurage therapy) with visual analogue pain assessment scale.

The research design adopted is given in the table s below :

Groups	Pre Test	Intervention	Post Test
Experimental	O_1	X_1	O_2
Control	O_3	---	0_4

$O_2 - O_1$ and $O_4 - O_2$ ⟶ Effectiveness of Effleurage

Key

O_1 – Pre test assessment of pain perception in experimental group.

X – Intervention on effleurge

O_2 – Post test assessment of pain perception in experimental group.

O_3 – Pre test assessment of pain perception in control group.

O_4 – Post test assessment of pain perception in control group.

Variables

A variable is an attribute of a person or object that varies that is taken on different values. Variables are measurable characteristics of a concept and consists of a logical group of attributes. Two types of variables are identified in this study. They are independent and dependent variables.

Research Design

Parturients

Accessible Population

Parturients admitted inTirumalai Hospital, and KVM Hospital, Pollachi

Sampling technique

Non Probability purposive sampling Technique

Data Collection

Structured Interview Schedule
Visual Analogue Scale

Experimental Group-30	Control Group-30
Pre –assessment of labour pain perception by VAS	Pre –assessment of labourpain Perception by VAS
Intervention on effleurage therapy	Routine nursing care
Post assessment of labour pain perception level by using VAS	Post assessment of labour pain perception level by using VAS

Data Analysis

Descriptive and Inferential Statistics

Criterion measures

Level of labour pain Perception

Fig.2.Schematic Representation of Research Methodology

Independent Variable

The variable that is believed to cause or influence the dependent variables in experimental research. The independent variable is the variable that is manipulated. In the present study the Effleurage massage was the independent variable.

Dependent Variable

The outcome variable of interest ; the variable that is hypothesized to depend on by another variable is called dependent variable. Level of labour pain perception was the dependent variable in the study.

Setting of the Study

Polit and Hungler (2004) stated that the physical location and condition in which data collection has taken place in a study is the setting of the study.

This study was conducted in Tirumalai Hospital and KVM Hospital, at Pollachi. The hospitals are located at a distance of 40 kms away from Annai Meenakshi College of Nursing. Tirumalai hospital is having 400 beds and approximately 500 mothers came for delivery each year and 70 mothers every month. KVM hospital is also equipped with 300 beds and the annual admission of the hospital for delivery is 400 and 50 mothers are admitted for delivery each month.

Population

According to Polit and Hungler (2005),"a population is the entire aggregation of cases in which a researcher is interested." Target population for the study was, all the mothers who are admitted for normal delivery. Accessible population for this

study was 60 mothers who are admitted for normal delivery in Tirumalai Hospital and KVM Hospital at Pollachi 30 each in experimental and control group.

Sample

Polit and Hungler, (2004) stated that sample consists of a sub set of population selected to participate in a research study.

In the present study the sample consisted of 60 prturients . Out of which 30 in experimental group were given Effleurage massage and 30 in control group were not received Effleurage massage.

Criteria for Sample Selection.

Inclusion Criteria

- Mothers who are admitted for vaginal delivery.
- Mothers who are willing to receive effleurage therapy.
- Mothers who can understand Tamil and English.

Exclusion Criteria

- High risk mothers like PIH, Eclampsia and Heart Diseases.
- Mothers who had narcotics in the past 8 hrs.

Sampling Technique

Talbot (1988) states that sampling is the process of selecting a portion of population to obtain data regarding a problem.

In the present study, the sampling technique was selected by using non probality sampling technique of purposive sampling method. The investigator had taken the list of parturients from the register kept in the labour room. The total sample size was 60. According to sampling criteria, the experimental group of 30 samples selected from Tirumalai hospital and control group of 30 samples selected from KVM hospital at Pollachi.

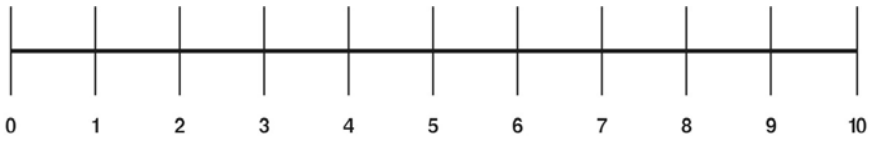
Description of the Tool

The tool used for data collection was Structured interview questionnaire and VAS. It consists of two parts

Part I: It consists of selected demographic and obstetric variables variables like age, education, occupation, income, type of family, gravida, para, induction of labour and type of rupture of membrane.

Part II: It consists of standardized VAS.

VISUAL ANALOG SCALE



No pain Mild pain Moderate pain Severe pain

Scoring Procedure

No Pain -- 0

Mild Pain -- 1-3

Moderate Pain	--	4-6
Severe Pain	--	7-10

Visual analogue scale consists of a straight line of 10 cm in length, representing a continuum of intensity and has verbal description at each end , “No pain” and “worst” pain possible” allocating the client total freedom in identifying the severity of pain by notifying any point on the continuum based on the criteria .

In this study the investigator measured the pain of parturient women in the Active phase of labour using standardized modified visual analogue scale by Johnson (1973) and George (1998) which is a numerical scale with 10 points ranging from “0” indicates “No pain” , 1-3 indicates “mild pain” , 4-6 indicates “moderate pain” and 7-10 indicates “severe pain”. The mother is asked to place a cross mark on the line at a point that best describes the degree of her pain based on criteria. With the centimeter ruler, the distance from the “no pain” end to the mark will measure and this measurement will be taken as pain score.

Intervention on Effleurage

Effleurage is a light pressure applied over lumbo sacral region to alleviate the pin perception in labour. Effleurage application was given during active phase (4-7cm) for experimental group by using palm of the hands in a circular motion for 30 minutes in between the contractions, without using any essential oils.

Validity and Reliability

Validity

Hoshingts – Tolsma (1989) stated that content validity is a judgment regarding how well the instrument represents the characteristics to be assessed.

To ensure the content validity the tool along with the statement of the problem, objectives, hypothesis, methodology and intervention protocol, criteria check list are given to 10 experts 7 OBG specialists, 2 Obstetricians and 1 Statistician. The necessary correction were made in the tool after consulting with the experts

First the investigator was decided to do an experimental study to assess the effectiveness of effleurage massage on parturients came for normal labour and level of pain perception by using visual Analog Scale. After content validity, all suggestion was considered and appropriate changes were made and the corrected tool was found to be valid.

Reliability

Visual Analogue Scale was used for the present study

Pilot Study

Polit and Hungler (1999) denote that the pilot study is a small scale version of trial run done in preparation for main study.

Pilot study was conducted in Abirami Hospital at Sundarapuram, Coimbatore to assess the feasibility of study and to decide the statistical analysis. The permission for conducting the study was obtained from the Medical Director of Abirami Hospital, Sundarapuram. 10 parturients were selected by using Non-Probability purposive sampling technique. These samples for pilot study processed the same characteristics as that of the sample of main study.The data analyzed showed a significant difference between the mean pre test and post test score of level of labour pain perception. And the 't' value found to be 5.80 which is significant at 0.005 level. This indicates that Effleurage was effective in reducing level of labour pain perception among parturients.

The tool and Effleurage massage proved to be feasible and practicable . No further change was done after pilot study in the tool and Effleurage massage application. The investigator then proceeded for final study.

Data Collection Procedure

The data collection procedure was planned for a period of 6weeks in Tirumamalai and K.V.M.Hospital, Pollachi. The permission to conduct study was obtained from the Medical Directors of both hospitals. The samples were informed by the researcher about the nature and purpose of study and written consent was obtained. After obtaining their written consent, structured Visual Analogue scale was used to asses pain level for experimental and control group. It took 10 minutes to collect data from each sample. Effleurage application was given during active phase (4-7cm) for experimental group by using palm of the hands in a circular motion for 30 minutes in between the contractions, without using any essential oils. Then the post

test level of pain was assessed by Visual Analogue Scale to the experimental group immediately after the intervention and the control group after the routine care.

Plan for Data Analysis

Data analysis is the systemic organization of research data and the testing of research hypothesis using that data.

The data were analyzed by using both descriptive and inferential statistics on the basis of objectives and hypothesis of the study. The data related to demographic variables were analyzed by using descriptive measures. The effectiveness of effleurage therapy was analyzed by dependent ‘t’ test, independent ‘t’ test and chi squire (inferential statistics)

Protection of Human Rights

The proposed study was conducted after the approval of dissertation committee of Annai Meenakshi College of Nursing. The nature and purpose of the study was explained to the health care personnel involved. The written consent was obtained from the study participants before starting data collection. Assurance was given to them that the anonymity of each individual would be maintained strictly.

DATA ANALYSIS AND INTERPRETATION

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

The chapter deals with analysis and interpretation of data collected from 60 Parturients to evaluate the effectiveness of effleurage in reducing labour pain perception.

Kerlinger, has defines 'Analysis' as the categorizing, ordering ,manipulating and summarizing of the data to obtain answer to research questions .The purpose of analysis is to reduce data to an intelligent and interpretable form so that the relations of research problems can be suited and tested.

The analysis and interpretation of this study was based on the data collected through structured interview method using Visual Analogue Pain Assessment Scale, among parturients. The results were computed using descriptive and inferential statistics.

The data obtained was analyzed using descriptive and inferential statistics and presented under the following headings.

Section-I : Data on demographic and obstetric variables of parturients with labour pain Perception in experimental and control group.

Section II : Data on level of labour pain perception among parturients in experimental

and control group.

Section III : Data on effectiveness of effleurage in reducing labour pain perception among parturients

Section IV : Data on association between level of labour pain perception and selected demographic and obstetric variables in experimental and control group.

SECTION I: DATA ON DEMOGRAPHIC AND OBSTETRIC VARIABLES OF PARTURIENTS WITH LABOUR PAIN PERCEPTION IN EXPERIMENTAL AND CONTROL GROUP.

Table: 1

Frequency and Percentage Distribution of Parturients in Relation to Their Selected Demographic and Obstetric Variables.

N=60

S.No.	Demographic Variables	Experimental Group		Control Group		Total	
		n	%	n	%	n	%
1	Age (in Years)						
	a) Below 25	14	47	11	37	25	42
	b) 26 –30	13	43	12	40	25	42
	c) 31 – 35	03	10	07	23	10	16
2	Education						
	a) Primary	08	27	11	37	19	32
	b) High School	10	33	09	30	19	32
	c) Higher Secondary	08	27	07	23	15	26
	d) Graduate	04	13	03	10	07	10
3	Occupation						
	a) Employed	05	17	08	27	13	20
	b) Un Employed	25	83	22	73	47	80

S.No.	Demographic Variables	Experimental Group		Control Group		Total	
		n	%	n	%	n	%
4	Family Income						
	a) <2000	10	33	06	20	16	27
	b) 2001 - 3000	09	30	11	37	20	33
	c) 3001 - 4000	08	27	10	33	18	30
	d) 4000	03	10	03	10	06	10
5	Type of family						
	a) Joint family	19	63	18	60	37	58
	b) Nuclear family	11	37	12	40	23	42
	Obstetric Variables						
6	Gravida						
	a)Primigaravida	15	50	16	53	31	52
	b)Multigravida	15	50	14	47	29	48
7	Para						
	a)Primipara	15	50	16	53	31	52
	b)Multipara	15	50	14	47	29	48
8	Memberanes						
	a)Intact	15	50	18	60	33	55
	b)Ruptured	15	50	12	40	27	45
9	Type of Induction						
	a)Spontaneous	16	53	16	53	32	53
	b)ARM	14	47	142	47	28	47

Table 1 reveals that with regards to age, the majority of the parturients were, 25 (42 %) belongs to below 25 years, in that 14(47%) belongs to experimental group and 11(37%) in control group respectively. 25 (42 %) belongs to the age group 26-30 years, among which 13(43 %) and 12 (40%) belongs experimental group and control group respectively. 10 (16 %) belongs to the age group between 31 -35 years, among which 03(10%) and 07(23%) belongs to experimental group and control group respectively.

Regarding educational status majority of the parturients with labour pain, 19(32%) comes under the criteria up to primary education , in that 08(27%) and 11(37%) belongs to experimental group and control group respectively. 19(32%) comes under High School, among which 10(33%) and 09(30%) belongs to experimental group and control group respectively. 16(26%) belongs to higher secondary education, among them 07(23%) belongs to experimental group and 08 (27%) belongs to control group respectively.07(10%) comes under Graduate, among them 4(13%) belongs to experimental group and 2(6%) belongs to control group respectively.

Regarding occupation, majority of parturients 47(80%) were unemployed, among which 25(83%) and 22(73 %)belongs to experimental group and control group respectively.13(22%) were private employees, among which,05(17%) and 08(27%) belongs to experimental group and control group respectively.

Regarding family income, majority of parturients 20(33%) comes under rupees two thousand and one to three thousand, among which 10(33%) and 06(20%)

belongs to experimental group and control group respectively.18 (30%) belongs to the income between rupees three thousand and one to four thousand, among which 08(27%) belongs to experimental group and 11(37%) belongs to control group.16(26%) were comes under rupees less than two thousand, among that 10(33%) belongs to experimental group and 06(20%) belongs to control group respectively. 06(10%) were comes under rupees more than four thousand, among them 03(10%) belongs to experimental group and 3(10%) belongs to control group respectively.

Regarding to type of family of the parturients with labour pain,37(58%) belongs to joint family, among which 19(63%) and 18(60%) belongs to experimental group and control group respectively. 23(42%) of parturients belongs to nuclear family, in that 11(37%) belongs to experimental group and 12(40%) belongs to control group respectively.

Regrding Gravida, the majority of the parturients were, 31 (52%) belongs to primigravida, in that 15(50%) belongs to experimental group and 16(53%) in control group respectively. 29 (48 %) belongs to Multigravida, among which 15(50 %) and 14 (47%) belongs experimental group and control group respectively.

Regarding Para majority of the parturients with labour pain, 31(52%) comes under the criteria primipara, in that 15(50%) and16 (53%) belongs to experimental group and control group respectively. 29(48%) comes under Multipara, among which 16(53%) and 14(47%) belongs to experimental group and control group respectively.

Regarding memberanes, majority of parturients 33(55%) were intact, among which 15(50%) and 18(60%)belongs to experimental group and control group respectively.27(45%) were memberanes ruptured, along them 15(50%) and 12(40%) belongs to experimental group and control group respectively.

Regarding Type of induction ,majority of parturients 32(53%) comes under spontaneous type, among which 16(53%) and 16(53%) belongs to experimental group and control group respectively.28 (47%) belongs to the ARM ,among which 14(47%) belongs to experimental group and 14(47%) belongs to control group respectively.

SECTION II : DATA ON LEVEL OF LABOUR PAIN PERCEPTION AMONG PARTURIENTS IN EXPERIMENTAL AND CONTROL GROUP

Table: 2.1

Frequency and Percentage Distribution of Pre test Level of Labour Pain Perception among Parturients in Experimental Group.

N=30

S No	Level of Labour Pain Perception	Classification of Respondents	
		n	%
1	No pain	0	0
2	Mild pain	0	0
3	Moderate pain	02	07
4	Severe pain	28	93

Table 2.1 reveals that among 30 Parturients, in Pre test, 02(07%) had moderate level of labour pain perception, and 28(93%) had severe level of labour pain perception in experimental group.

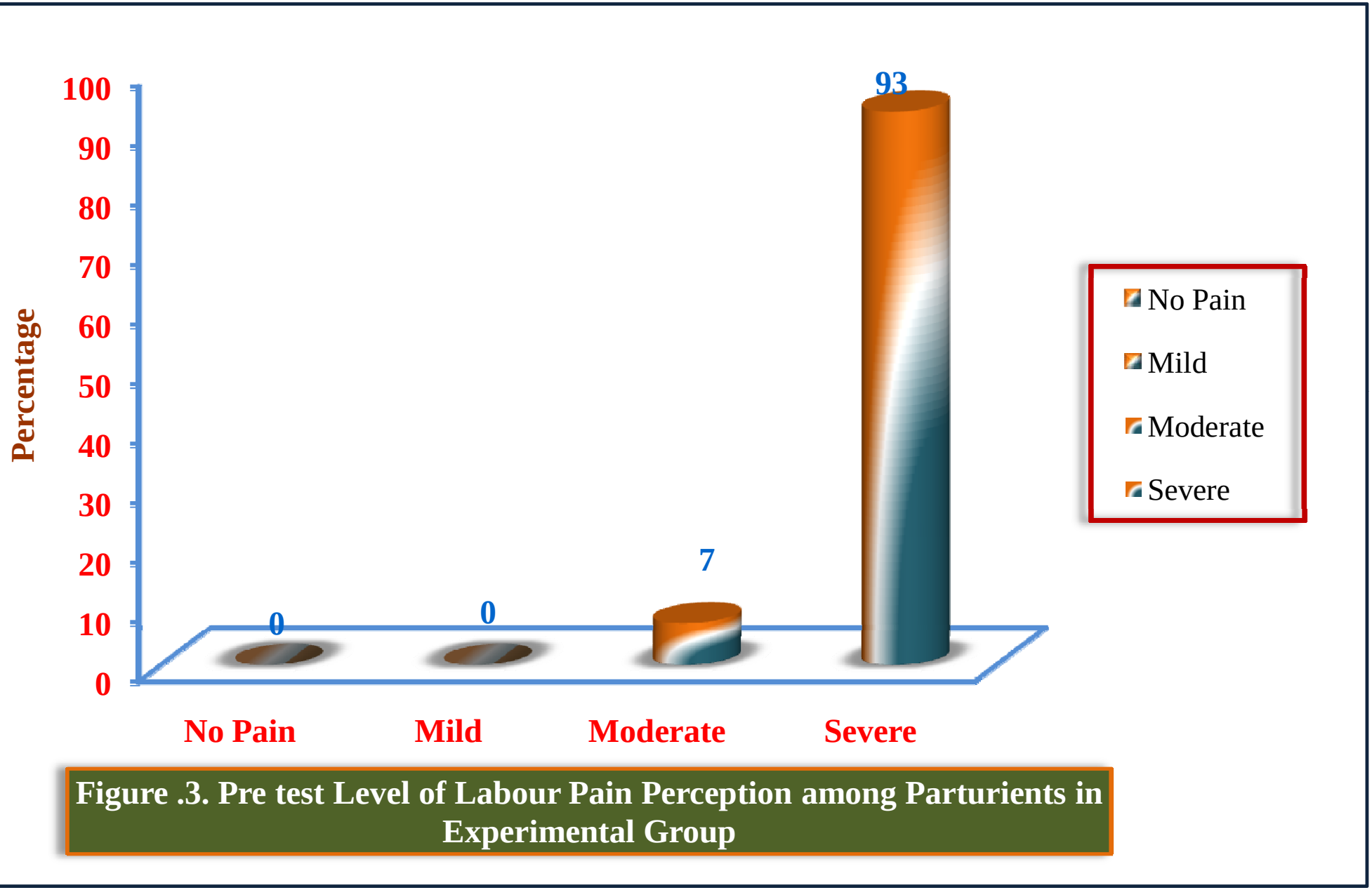


Figure .3. Pre test Level of Labour Pain Perception among Parturients in Experimental Group

Table: 2.2

Frequency and Percentage Distribution of Pre test Level of Labor Pain Perception among Parturients in Control Group.

N=30

S No	Level of Labour Pain Perception	Classification of Respondents	
		n	%
1	No pain	0	0
2	Mild pain	0	0
3	Moderate pain	04	14
4	Severe pain	26	86

Table 2.2 reveals that among 30 Parturients, in Pre test, 04(14%) had moderate level of labour pain perception, and 26(86%) had severe level of labour pain perception in control group.

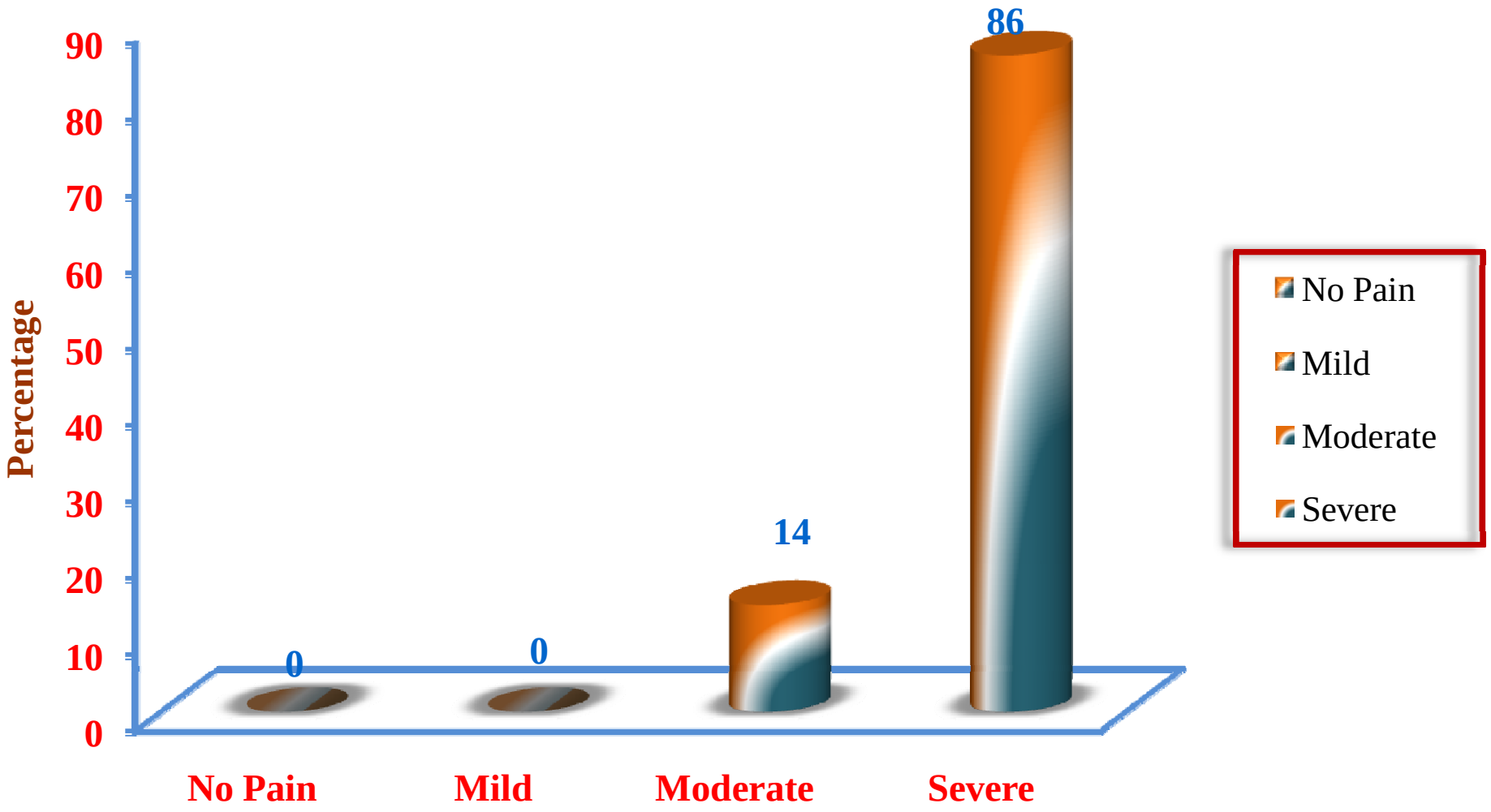


Figure 4. Pre test Level of Labour Pain Perception among Parturients in Control Group

SECTION III : DATA ON EFFECTIVENESS OF EFFLEURAGE IN REDUCING LABOUR PAIN PERCEPTION AMONG PARTURIENTS

Table 3.1

Frequency and Percentage Distribution of Pre test and Post test Level of Labour Pain Perception among Partutients in Experimental Group.

N=30

S.no	Labour Pain Perception	Classification of Respondents			
		Pre test		Post test	
		n	%	n	%
1	No Pain	0	0	0	0
2	Mild Pain	0	0	10	23
3	Moderate Pain	02	07	20	67
4	Severe Pain	28	93	0	0

Table 3.1 revels that among 30 parturients in pre test 02(7%) of them had moderate level of labour pain perception and 28 (93%) had severe level of labour pain perception. In post test 10 (33%) of parturients had moderate level of labour pain perception and 20(67%) had severe level of labour pain perception.

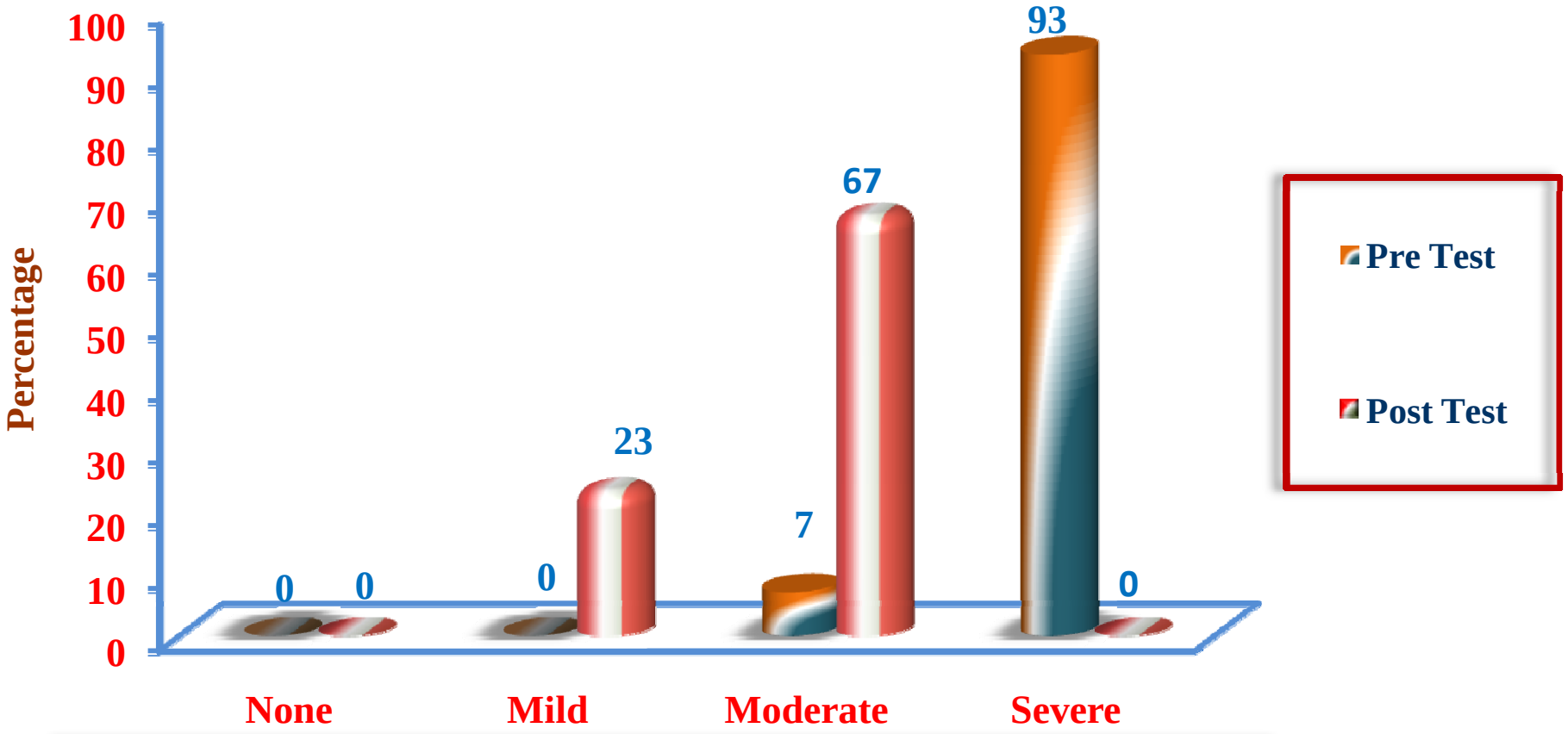


Figure 5. Pre test and Post test Level of Labour Pain Perception among Parturients In Experimental Group

Table 3.2

Frequency and Percentage Distribution of Pre test and Post test Level of Labour Pain Perception among Parturients in Control Group.

N=30

S.no	Labour Pain Perception	Classification of Respondents			
		Pre test		Post test	
		n	%	n	%
1	No Pain	0	0	0	0
2	Mild Pain	0	0	0	0
3	Moderate Pain	04	14	06	20
4	Severe Pain	26	86	24	80

Table 3.2 reveals that among 30 parturients in pre test 04(13%) of them had moderate level of labour pain perception and 26 (87%) had severe level of labour pain perception. In post test 06 (20%) of parturients had moderate level of labour pain perception and 24(80 %) had severe level of labour pain perception

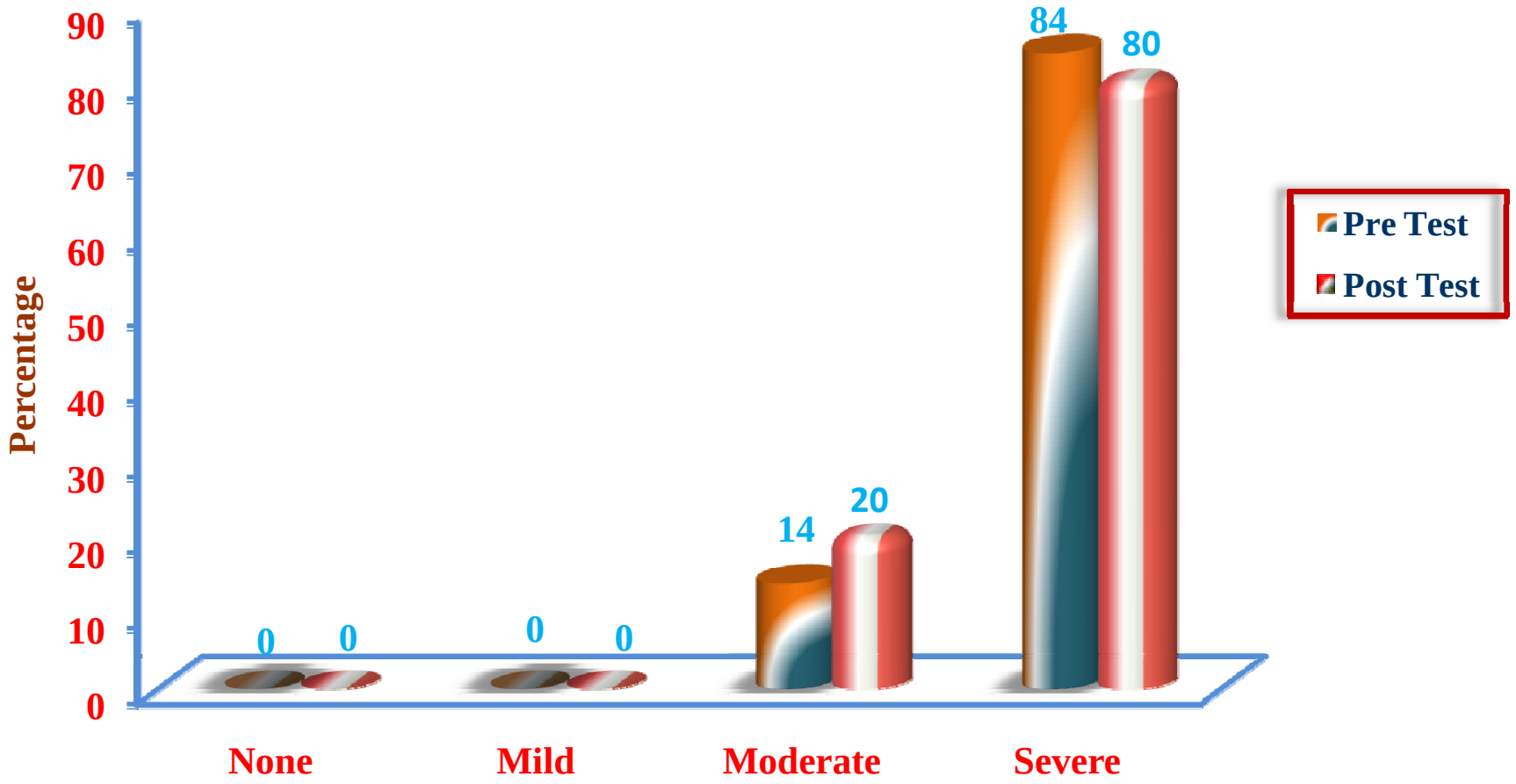


Figure 6. Pre test and Post test Level of Labour Pain Perception among Parturients in Control Group

Table 3.3

Mean, Standard Deviation, Mean difference and 't' Value of Pre-test and Post-test Level of Labour Pain Perception among Parturients in Experimental Group.

N=30

S. No	Aspects	Mean	SD	MD	't' value
1.	Pre test	7.83	0.95	3.93	21.97*
2.	Post test	3.9	0.73		

*Significant at $p<0.05$ level

Table 3.3 reveals that among 30 parturients in experimental group, the mean pretest was 7.83 with standard deviation of 0.95 was more than the mean post test was 3.9 with standard deviation of 0.73. The calculated mean difference was 3.93. The obtained't' value 21.97 which was highly significant at $p<0.05$ level.H_1 accepted.

H_1: There will be a significant difference between the mean pre and post test level of labour pain perception among parturients in experimental group.

It is inferred that there is a significant difference between the pre and post test level of labour pain perception among parturients in experimental group.

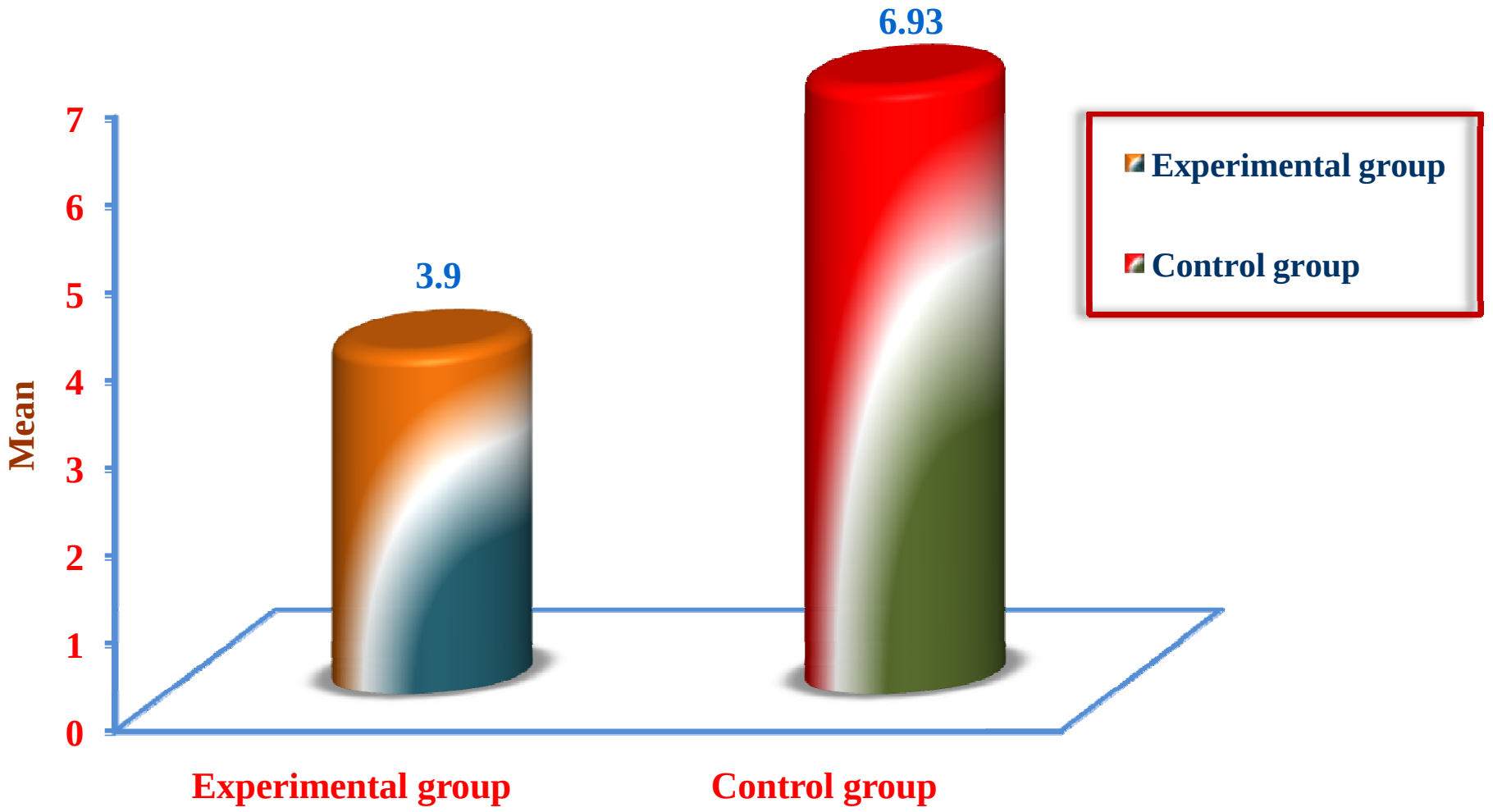


Figure 9. The Mean Level of Labour Pain Perception among Parturients between Experimental and Control Group

Table 3.4

Mean, Standard Deviation, Mean difference and 't' Value of Pre-test and Post-test Level of Labour Pain Perception among Parturients in Control Group.

N=30

S. No	Aspects	Mean	SD	MD	't' value
1	Pre test	7.60	0.89	0.2	1.29
2	Post test	7.40	0.89		

Table 3.4 reveals that among 30 parturients in control group, the mean pretest was 7.60 with standard deviation of 0.89 less than the mean post test was 7.40 with standard deviation 0.89 and the calculated mean difference was 0.2 and the obtained 't' value 1.29 was not significant at $p< 0.05$ level.H_2 is not accepted .

H_2: There will be a significant difference between the mean pre and post test level of labour pain perception among parturients in control group.

It is inferred that there is a significant difference between pre and post test level of labour pain perception among parturients in control group.

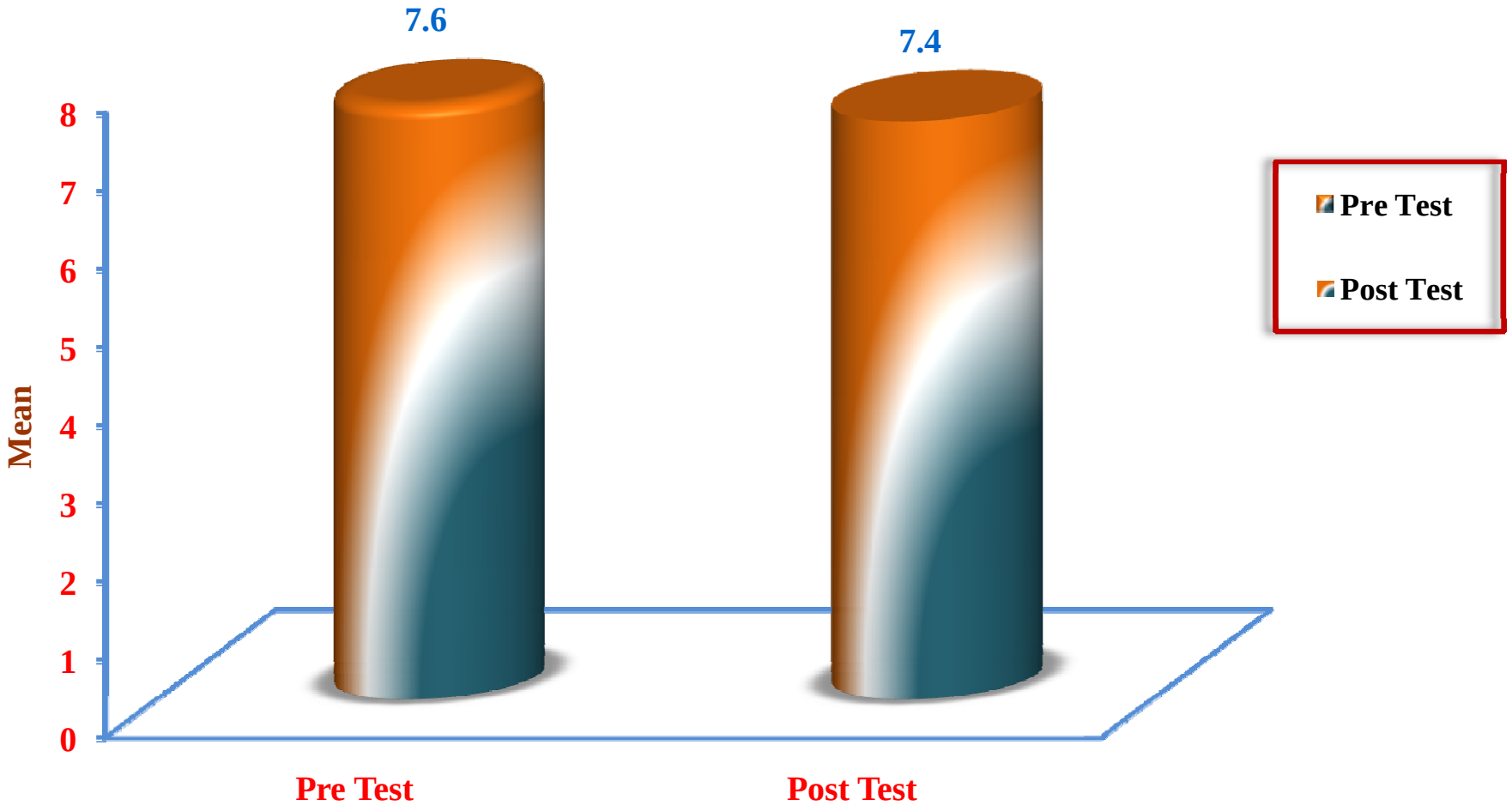


Figure 8. The Mean Value on Level of Labour Pain Perception among Parturients in Control Group

Table 3.5

Mean, Standard Deviation, Mean Difference and 't' value of Post-test Level of Labour Pain Perception among Parturients between Experimental and Control Group

N= 60

S. No	Groups	Mean	SD	MD	't' value
1	Experimental group	3.90	.076	3.03	14.41*
2	Control group	6.93	0.87		

*Significant at $p<0.05$ level.

The above table shows that the Mean, Standard Deviation, Mean Difference and 't' Value of Pre-test of labour pain perception in Experimental and Control Group. In experimental group, the mean post test was 3.90 with a standard deviation of 0.76. In control group, the mean post test was 6.93 with a standard deviation of 0.87. The calculated mean difference was 3.03 and the obtained 't' value was 14.41 which is significant at $p<0.05$ level.H_3 is accepted.

$H_{3:}$ There will be a significant difference between the mean post test level of labour pain perception among parturients in experimental and control group.

It is inferred that effleurage is effective to reduce the the labour pain perception among parturients.

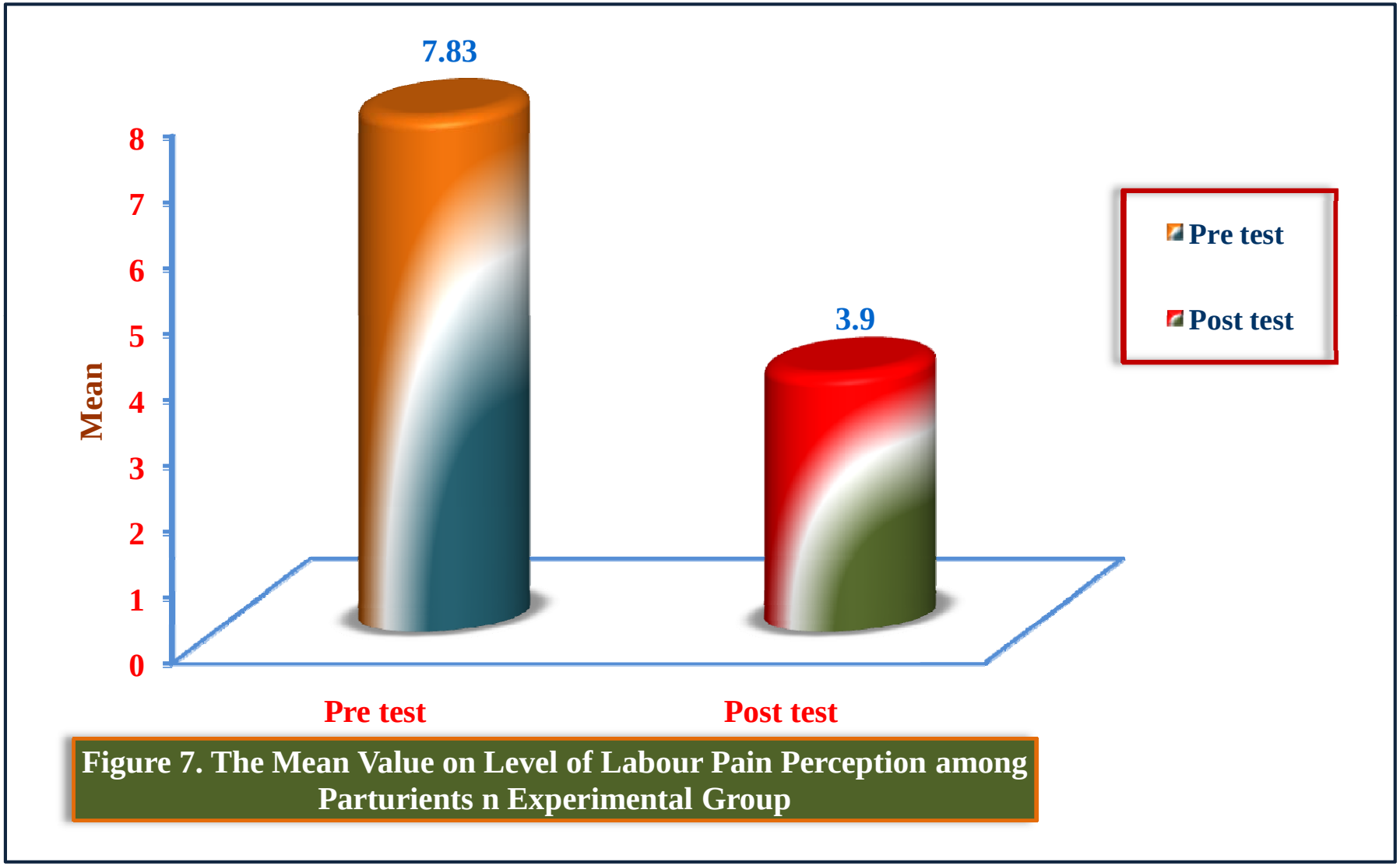


Figure 7. The Mean Value on Level of Labour Pain Perception among Parturients n Experimental Group

SECTIONIV: DATA ON ASSOCIATION BETWEEN LEVEL OF LABOUR PAIN PERCEPTION AND SELECTED DEMOGRAPHIC AND OBSTETRIC VARIABLES IN EXPERIMENTAL AND CONTROL GROUP.

Table: 4.1

Frequency, Percentage Distribution and χ^2Value of Pre test Level of Labour Pain Perception among Parturients with their Selected Demographic and Obstetric Variables in Experimental Group.

N=30

S. No	Demographic Variables	Level of labour pain perception						χ^2 Value
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
1	Age (in years)							
	a) Below 25 yrs	00	00	01	03	13	44	0.24
	b) 26 -30 yrs	00	00	01	03	12	40	df=2
	c) 31-35 yrs	00	00	00	00	03	10	
2	Education							
	a) Primary	00	00	01	03	07	24	1.47
	b) High School	00	00	01	03	09	30	df=3
	c) Higher secondary	00	00	00	00	08	27	
	d) Graduate	00	00	00	00	04	13	
3	Occupation							
	a) Employed	00	00	00	00	05	17	0.42
	b) Un employed	00	00	02	06	23	77	df=1

S. No	Demographic Variables	Level of labour pain perception						χ^2 Value
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
4	Family Income							
	a) <2000	00	00	01	03	09	30	1.25
	b) 2001 -3000	00	00	01	03	08	27	df=3
	c) 3001 - 4000	00	00	00	00	08	27	
	d) >4000	00	00	00	00	03	10	
5	Type of family							
	a) Joint family	00	00	00	00	18	60	3.70
	b) Nuclear	00	00	02	07	10	33	df=1
	ObstetricVariables							
6	Gravida							
	a)Primigravida	00	00	00	00	15	50	2.14
	b)Multigravida	00	00	02	07	13	43	df=1
7	Para							
	a)Primipara	00	00	00	00	15	50	2.14
	b)Multipara	00	00	02	07	13	43	df=1
8	Membranes							
	a)Intact	00	00	00	00	15	50	2.14
	b)Ruptured	00	00	02	07	13	43	df=1
9	Type Of Induction							
	a)Spontaneously	00	00	01	03	14	47	15.00*
	b)ARM	00	00	01	03	14	47	df=2

Table 4.1shows the substantive summary of Chi-Square analysis, which was used to bring out the relationship between the labour pain perception with their selected demographic variables.

In experimental group with regard to age, below 25 years 13(44%) parturients experienced severe level of pain perception, 01(03%) had moderate level of pain perception. Among 26 to 30 years, majority 12(40%) of parturients experienced severe level of pain perception and 01(03%) experienced moderate level of pain. Among 31 to 35 years, majority 03(10%) experienced severe level of pain perception and no one experienced moderate pain. The obtained value is 0.24 and is statistically not significant at $P<0.05$ level. Hence it is inferred that age is not statistically associated with level of labour pain perception and the stated hypothesis

H_4: There will be a significant association between the level of labour pain perception among parturients with their selected demographic and obstetric variables in experimental and control group.

Regarding education, parturients with Primary education majority 07(24%) experienced severe level of pain perception and 01(03%) had moderate level of pain perception. Among High School educated parturients 8(27%) experienced severe level of pain perception and 1(3%) experienced moderate level. Among Higher secondary educated parturients 08(27%) experienced severe level of pain perception and no one experienced moderate level of pain perception. Among Graduate 4(13%) experienced severe level of pain perception and no one in moderate level. The obtained value is 1.47 and which is not statistically significant at $P<0.05$ level. Hence

it is inferred that education is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to occupation, among un Employed parturients 23 (77%) of experienced severe level of pain perception, 02(06%) had moderate level of pain perception. Among Employed parturients 05(17%) experienced severe level of pain perception and no one experienced moderate level of pain. The obtained value is 0.42 and is statistically not significant at $P<0.05$ level. Hence it is inferred that occupation is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to family income, parturients belongs to rupees less than two thousand 09(30%) experienced severe level of pain perception and 01(03%) had moderate level of pain perception. Among parturients belongs to rupees two thousand one to three thousand 08(27 %) had experienced severe level of pain perception and 01(03%) experienced mild level of pain perception. And those who belongs to rupees three thousand one to four thousand 08 (27%) experienced severe level of pain perception and no one in moderate level. And those who belongs to more than four thousand rupees 03 (10%) experienced severe level of pain and no one in moderate category. The obtained value is 1.25 and is not statistically significant at $P<0.05$ level. Hence it is inferred that family income is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to type of family, 18(60%) of parturients from joint family had severe level of pain perception and no one in moderate level. Among parturients

belongs to nuclear family 10(33%) experienced severe level of pain perception and 2(17%) experienced moderate level of pain perception. The obtained value is 3.21 and which is not statistically significant at P<0.05 level. Hence it is inferred that type of family is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

In experimental group with regard to gravida, among primigravida majority 15(50%) of parturients experienced severe level of pain perception and no one experienced with moderate or mild level of pain perception. Among multiparous parturients 15(50%) of parturients experienced severe level of pain perception and 2 (7%) experienced with moderate level of pain perception. The obtained value is 2.14 and which is not statistically significant at P<0.05 level. Hence it is inferred that gravida is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

Regarding parity, majority of primiparous parturients 15(50%) parturients experienced severe level of pain perception and no one experienced with moderate and mild pain. Among multipara majority 13(43%) of parturients experienced severe level of pain perception and 2 (7%) experienced with moderate level of pain perception. The obtained value is 2.14 and which is not statistically significant at P<0.05 level. Hence it is inferred that para is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to type of membranes among 15 (50%) of parturients with intact membranes experienced severe pain perception and no one experiences moderate

level of pain perception. Among parturients with ruptured membrane 13(43%) experiences severe level of pain perception and 2(7%) experiences moderate level of pain perception. The obtained value is 2.14 and which is not statistically significant at $P<0.05$ level. Hence it is inferred that type of memberanes is not statistically associated with level of labour pain perception and the stated hypothesis H4 is rejected.

With regard to type of induction,14(47%) of parturients in spontaneous rupture experienced severe pain perception and no one experiences moderate level of labour pain perception.14(47%) of parturients with ARM experiences severe level of labour pain perception and 1(3%) experiences moderate level of pain perception. The obtained value is 15.00 and which is statistically significant at $P<0.05$ level. Hence it is inferred that type of induction is statistically associated with level of labour pain perception and the stated hypothesis H_4 is accepted.

Table: 4.2

Frequency, Percentage Distribution and χ^2 Value of Pre test Level of Labour Pain Perception among Parturients with their Selected Demographic and Obstetric Variables in Control Group.

N=30

S. No	Demographic Variables	Level of labour pain perception						χ^2 Value
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
1	Age (in years)							
	a)Below 25 yrs	00	00	01	03	10	33	0.29
	b) 26 -30 yrs	00	00	02	07	10	33	df=2
	c) 31-35 yrs	00	00	01	03	06	20	
2	Education							
	a) Primary	00	00	00	00	11	36	4.18
	b) High School	00	00	02	07	07	23	df=3
	c) Higher secondary	00	00	02	07	05	16	
	d) Graduate	00	00	00	00	03	10	
3	Occupation							
	a) Employed	00	00	00	00	08	26	1.67
	b) Un employed	00	00	04	13	18	60	df=1
4	Family Income							
	a) <2000	00	00	00	00	06	20	6.05
	b) 2001 -3000	00	00	00	00	11	36	df=3
	c) 3001 - 4000	00	00	03	10	07	23	
	d) >4000	00	00	01	03	02	06	

S. No	Demographic Variables	Level of labour pain perception						χ^2 Value
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
5	Type of family							
	a)Joint family	00	00	03	10	15	50	2.41
	b)Nuclear	00	00	03	10	09	30	df=2
6	Obstetric Variables							
	Gravida							
	a)Primigravida	00	00	02	07	14	46	0.21
	b)Multigravida	00	00	02	07	12	40	df=1
7	Para							
	a)Primipara	00	00	02	07	14	46	021
	b)Multipara	00	00	02	07	12	40	df=1
8	Membranes							
	a)Intact	00	00	03	10	15	50	0.433
	b)Ruptured	00	00	01	03	11	37	df=1
9	Type Of Induction							
	a)Spontaneously	00		04	13	12	40	4.03
	b)ARM	00		00	00	14	47	df=2

Table 4.2 shows the substantive summary of Chi-Square analysis, which was used to bring out the relationship between the labour pain perception with their selected demographic and obstetric variables.

In control group with regard to age, below 25 years 10(33%) parturients experienced severe level of pain perception, 01(03%) had moderate level of pain perception. Among 26 to 30 years, majority 10(33%) of parturients experienced severe level of pain perception and 02(08%) experienced moderate level of pain perception. Among 31 to 35 years, majority 06(20%) experienced severe level of pain perception and 1(3%) experienced moderate pain level. The obtained χ^2 value is 0.29 which is statistically not significant at P<0.05 level. Hence it is inferred that age is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

H4 : There will be significant association between the level of labour pain perception among partuients with their selected demographic and obstetric variables in experimental and control group.

Regarding education, parturients with Primary education majority 11(37%) experience severe level of pain perception and no one had mild and moderate level of pain perception. Among High School educated parturients 7(23%) experienced severe level of pain perception and 2(7%) experienced moderate level. Among Higher secondary educated parturients 05(16%) experienced severe level of pain perception and 2 (7%) experiences moderate level of pain perception. Among Graduate 3(10%) experienced severe level of pain perception and no one had mild and moderate level of pain perception. The obtained χ^2 value is 4.18 and which is not statistically significant at P<0.05 level. Hence it is inferred that education is not statistically associated with level of labour pain perception and the stated hypothesis H_2 is rejected.

With regard to occupation, among employed parturients 08 (27%) of experienced severe level of pain perception, and no one had mild and moderate level of pain perception. Among Unemployed parturients 18(60%) experienced severe level of pain perception and 4 (13%) experienced moderate level of pain. The obtained χ^2 value is 1.67 which is statistically not significant at P<0.05 level. Hence it is inferred that occupation is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to family income, parturients belongs to rupees less than two thousand 06(20%) experienced severe level of pain perception and no one had mild level of pain perception. Among parturients belongs to rupees two thousand one to three thousand 11(37 %) had experienced severe level of pain perception and no one experienced mild level of pain perception. And those who belongs to rupees three thousand one to four thousand 07 (24%) experienced severe level of pain perception and 3(10%) in moderate level. And those who belongs to more than four thousand rupees 02 (06%) experienced severe level of pain and 1(03%) in mild category. The obtained χ^2 value is 6.05 which is not statistically significant at P<0.05 level. Hence it is inferred that family income is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to type of family, 15(50%) of parturients from joint family had severe level of pain perception and 03(10%)in moderate level. Among parturients belongs to nuclear family 09(30%) experienced severe level of pain perception and 03(10%) experienced moderate level of pain perception. The obtained χ^2 value is 2.41 and which is not statistically significant at P<0.05 level. Hence it is inferred that type

of family is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

In control group with regard to gravida, among primigravida majority 14(46%) of parturients experienced severe level of pain perception and 2(7%) experienced with moderate level of pain perception. Among multiparous parturients 12(40%) of parturients experienced severe level of pain perception and 2(7%) experienced with moderate level of pain perception. The obtained χ^2 value is .021 and which is not statistically significant at $P<0.05$ level. Hence it is inferred that gravida is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

Regarding parity, majority of primiparous parturients 14(46%) parturients experienced severe level of pain perception and 2 (07%) experienced with moderate pain. Among multipara majority 12(40%) of parturients experienced severe level of pain perception and 2(7%) experienced with moderate level of pain perception. The obtained χ^2value is .025 and which is not statistically significant at $P<0.05$ level. Hence it is inferred that para is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to type of membranes among 15(50%) of parturients with intact membranes experienced severe pain perception and 3(10%) experiences moderate level of pain perception. Among parturients with ruptured membrane 11(37%) experiences severe level of pain perception and 1(3%) experiences moderate level of pain perception. The obtained χ^2 value is 0.43 and which is not statistically significant

at P<0.05 level. Hence it is inferred that type of memberanes is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to type of induction,12(40%) of parturients in spontaneous rupture experienced severe pain perception and 4(13%) experiences moderate level of labour pain perception.14(47%) of parturients with ARM experiences severe level of labour pain perception andno one experiences mild and moderate level of pain perception. The obtained χ^2 value is 4.03 and which is not statistically significant at P<0.05 level. Hence it is inferred that type of induction is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

Table: 4.3

Frequency, Percentage Distribution and χ^2 Value of Post Test Level of Labour Pain Perception among Parturients with their Selected Demographic and Obstetric Variables in Experimental Group.

N=30

S. No	Demographic Variables	Level of labour pain perception						χ^2 Value
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
1	Age (in years)							
	a) Below 25 yrs	00	00	01	03	10	33	0.29
	b) 26 -30 yrs	00	00	02	08	10	33	df=2
	c) 31-35 yrs	00	00	01	03	06	20	
2	Education							
	a)Primary	00	00	00	00	11	37	4.18
	b)High School	00	00	02	07	07	23	df=3
	c)Higher secondary	00	00	02	07	05	16	
	d)Graduate	00	00	00	00	03	10	
3	Occupation							
	a)Employed	00	00	00	00	08	27	1.67
	b)Un employed	00	00	04	13	18	60	df=1
4	Family Income							
	a) <2000	00	00	00	00	06	20	
	b) 2001 -3000	00	00	00	00	11	37	6.05
	c) 3001 - 4000	00	00	03	10	07	24	df=3
	d) >4000	00	00	01	03	02	06	

Cont

S. No	Demographic Variables	Level of labour pain perception						χ^2 Value
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
5	Type of family							
	a) Joint family	05	17	14	46	00	00	1.148
	b) Nuclear	05	17	06	20	00	00	df=1
	Obstetric Variables							
	Gravida							
6	a)Primigravida	03	10	12	40	00	00	2.40
	b)Multigravida	07	23	08	27	00	00	df=1
7	Para							
	a)Primipara	03	10	12	40	00	00	2.40
	b)Multipara	07	23	08	27	00	00	df=1
8	Membranes							
	a)Intact	01	03	14	47	00	00	9.60*
	b)Ruptured	09	13	06	20	00	00	df=1
9	Type Of Induction							
	a)Spontaneously	08	27	08	27	00	00	4.29
	b)ARM	02	06	12	40	00	00	df=1

Table 4.3 shows the substantive summary of Chi-Square analysis, which was used to bring out the relationship between the post labour pain perception with their selected demographic and obstetric variables.

In experimental group with regard to age, below 25 years 11(37%) parturients experienced moderate level of pain perception, 03(10%) had mild level of pain perception. Among 26 to 30 years, majority 08(27%) of parturients experienced moderate level of pain perception and 05(16%) experienced mild level of pain.Among 31 to 35 years, majority 01(03%) experienced moderate level of pain perception and 02(07%) experienced mild pain. The obtained χ^2 value is 2.55 which is statistically not significant at $P<0.05$ level. Hence it is inferred that age is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

H4: There will be significant association between the level of labour pain perception among partuients with their selected demographic and obstetric variables in experimental and control group.

Regarding education, parturients with Primary education majority 04(13%) experienced moderate level of pain perception and 04(13%) had mild level of pain perception. Among High School educated parturients 7(23%) experienced moderate level of pain perception and 3(11%) experienced mild level. Among Higher secondary educated parturients 07(23%) experienced moderate level of pain perception and 1(3%) experienced mild level of pain perception. Among Graduate 2(7%) experienced moderate level of pain perception and 2(7%) mild level. The obtained χ^2 value is 3.11 which is statistically not significant at $P<0.05$ level. Hence it is inferred that education is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to occupation, among un Employed parturients 17 (57%) of experienced moderate level of pain perception, 08(26%) had mild level of pain perception. Among Employed parturients 03(10%) experienced moderate level of pain perception and 2(7%) experienced mild level of pain. The obtained χ^2 value is .120 which is statistically not significant at P<0.05 level. Hence it is inferred that occupation is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to family income, parturients belongs to rupees less than two thousand 06(20%) experienced moderate level of pain perception and 04(13%) had mild level of pain perception. Among parturients belongs to rupees two thousand one to three thousand 04(13 %) had experienced moderate level of pain perception and 05(17%) experienced mild level of pain perception. And those who belongs to rupees three thousand one to four thousand 08 (27%) experienced moderate level of pain perception and no one in moderate level.And those who belongs to more than four thousand rupees 02(07%) experienced moderte level of pain and 1 (3%) in mild category. The obtained χ^2 value is 6.20 which is not statistically significant at P<0.05 level. Hence it is inferred that family income is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to type of family, 14(46%) of parturients from joint family had moderate level of pain perception and 5(17%) in mild level. Among parturients belongs to nuclear family 06(20%) experienced moderate level of pain perception and 5(17%) experienced mild level of pain perception. The obtained value is 1.148 which is not statistically significant at P<0.05 level. Hence it is inferred that type of

family is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

In experimental group with regard to gravida, among primigravida majority 12(40%) of parturients experienced moderate level of pain perception and 3 (10%) experienced with mild level of pain perception. Among multiparous parturients 8(27%) of parturients experienced moderate level of pain perception and 7 (23%) experienced with mild level of pain perception. The obtained χ^2 value is 2.40 and which is not statistically significant at $P<0.05$ level. Hence it is inferred that gravida is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

Regarding parity, majority of primiparous parturients 12(40%) parturients experienced moderate level of pain perception and 3(10%) experienced with mild pain. Among multipara majority 08(27%) of parturients experienced moderate level of pain perception and 7 (23%) experienced with mild level of pain perception. The obtained χ^2 value is 2.40 which is not statistically significant at $P<0.05$ level. Hence it is inferred that para is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to type of membranes among 14(47%) of parturients with intact membranes experienced moderate level of pain perception and 1(03%) experiences mild level of pain perception. Among parturients with ruptured membrane 6(20%) experiences moderate level of pain perception and 9(30%) experiences mild level of pain perception. The obtained value is 9.60 and which is statistically significant at

P<0.05 level. Hence it is inferred that type of memberanes is statistically associated with level of labour pain perception and the stated hypothesis H_4 is accepted.

With regard to type of induction,8(27%) of parturients in spontaneous rupture experienced moderate level of pain perception and 8 (27%) experiences mild level of labour pain perception.12(40%) of parturients with ARM experiences moderate level of labour pain perception and 2(7%) experiences mild level of pain perception. The obtained value is 4.29 and which is statistically not significant at P<0.05 level. Hence it is inferred that type of induction is statistically not associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

Table: 4.4

Frequency, Percentage Distribution and χ^2Value of Post test Level of Labour Pain Perception of Parturients with their Selected Demographic and Obstetric Variables in Control Groups. N= 30

S. No	Demographic Variables	Level of labour pain perception						χ^2 Value
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
1	Age (in years)							
	a) Below 25 yrs	00	00	03	10	08	27	.733
	b) 26 -30 yrs	00	00	03	10	09	30	df=2
	c) 31-35 yrs	00	00	03	10	04	13	
2	Education							
	a) Primary	00	00	06	20	05	17	5.524
	b) High School	00	00	01	03	08	27	df=3
	c) Higher secondary	00	00	01	03	06	20	
	d) Graduate	00	00	01	03	02	07	
3	Occupation							
	a) Employed	00	00	01	03	07	23	1.59
	b) Un employed	00	00	08	27	14	47	df=1
4	Family Income							
	a) <2000	00	00	02	07	04	13	.736
	b) 2001 -3000	00	00	04	13	07	23	df=3
	c) 3001 - 4000	00	00	02	07	08	27	
	d) >4000	00	00	01	03	02	07	

S. No	Demographic Variables	Level of labour pain perception						χ^2 Value
		Mild		Moderate		Severe		
		n	%	n	%	n	%	
5	Type of family							
	a) Joint family	00	00	07	23	09	30	3.08
	b) Nuclear	00	00	02	07	12	40	df=1
	Obstetric Variables							
6	Gravida							
	a)Primigravida	00	00	02	07	14	47	5.00*
	b)Multigravida	00	00	07	23	07	23	df=1
7	Para							
	a)Primipara	00	00	02	07	14	47	5.00*
	b)Multipara	00	00	07	23	07	23	df=1
8	Membranes							
	a)Intact	00	00	08	23	10	33	4.47
	b)Ruptured	00	00	01	03	11	37	df=1
9	Type Of Induction							
	a)Spontaneously	00	00	04	13	12	40	0.49
	b)ARM	00	00	05	17	09	30	df=1

Table 4.4 shows the substantive summary of Chi-Square analysis, which was used to bring out the relationship between the post test score of labour pain perception with their selected demographic variables and obstetric variables.

In control group with regard to age, below 25 years 08(27%) parturients experienced severe level of pain perception, 03(10%) had moderate level of pain perception. Among 26 to 30 years, majority 09(30%) of parturients experienced severe level of pain perception and 03(10%) experienced moderate level of pain perception. Among 31 to 35 years, majority 04(13%) experienced severe level of pain perception and 3(10%) experienced moderate pain level. The obtained χ^2 value is .733 which is statistically not significant at P<0.05 level. Hence it is inferred that age is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

H4: There will be significant association between the level of labour pain perception among partuients with their selected demographic and obstetric variables in experimental and control group.

Regarding education, parturients with Primary education majority 05(17%) experience severe level of pain perception and 6 (20%) had modrate level of pain perception. Among High School educated parturients 8(27%) experienced severe level of pain perception and 1(3%) experienced moderate level. Among Higher secondary educated parturients 06(20%) experienced severe level of pain perception and 1(03%) experiences moderate level of pain perception. Among Graduate 02(07%) experienced severe level of pain perception and 01 (03%) had moderate level of pain perception. The obtained χ^2 value is 5.52 and which is not statistically significant at P<0.05 level. Hence it is inferred that education is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to occupation, among employed parturients 07 (23%) of experienced severe level of pain perception,and 01(03%) had modrerate level of pain perception. Among unemployed parturients 14(47%) experienced severe level of pain perception and 08 (27%) experienced moderate level of pain. The obtained χ^2 value is 1.59 which is statistically not significant at P<0.05 level. Hence it is inferred that occupation is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to family income, parturients belongs to rupees less than two thousand 04(13%) experienced severe level of pain perception and 2 (07%)had modeate level of pain perception. Among parturients belongs to rupees two thousand one to three thousand 07(237%) had experienced severe level of pain perception and 4(13%)experienced moderate level of pain perception. And those who belongs to rupees three thousand one to four thousand 08 (27%) experienced severe level of pain perception and 02(07%) in moderate level. And those who belongs to more than four thousand rupees 02 (07%) experienced severe level of pain and 1(03%) in mild category. The obtained χ^2 value is .736 which is not statistically significant at P<0.05 level. Hence it is inferred that family income is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

With regard to type of family, 09(30%) of parturients from joint family had severe level of pain perception and 07(23%) in moderate level. Among parturients belongs to nuclear family 12(40%) experienced severe level of pain perception and 02(07%) experienced moderate level of pain perception. The obtained χ^2 value is 3.08 and which is not statistically significant at P<0.05 level. Hence it is inferred that

type of family is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

In control group with regard to gravida, among primigravida majority 14(47%) of parturients experienced severe level of pain perception and 2(7%) experienced with moderate level of pain perception. Among multiparous parturients 07(23%) of parturients experienced severe level of pain perception and 7(23%) experienced with moderate level of pain perception. The obtained χ^2 value is 5.00 and which is statistically significant at $P<0.05$ level. Hence it is inferred that gravida is statistically associated with level of labour pain perception and the stated hypothesis H_4 is accepted.

Regarding parity, majority of primiparous parturients 14(47%) parturients experienced severe level of pain perception and 2 (07%) experienced with moderate pain. Among multipara majority 07(23%) of parturients experienced severe level of pain perception and 07(23%) experienced with moderate level of pain perception. The obtained χ^2 value is 5.00 which is statistically significant at $P<0.05$ level. Hence it is inferred that para is statistically associated with level of labour pain perception and the stated hypothesis H_4 is accepted.

With regard to type of membranes among 10(33%) of parturients with intact membranes experienced severe pain perception and 8(27%) experiences moderate level of pain perception. Among parturients with ruptured membrane 11(37%) experiences severe level of pain perception and 1(3%) experiences moderate level of pain perception. The obtained χ^2 value is 4.47 and which is not statistically

significant at $P<0.05$ level. Hence it is inferred that type of memberanes is not statistically associated with level of labour pain perception and the stated hypothesis H_4 is rejected.

DISCUSSION

CHAPTER-V

DISCUSSION

The basic aim of the present study was to evaluate the effectiveness of effleurage in reducing labour pain perception among parturients in selected hospitals. The study was conducted by using Quasi Experimental pretest post test design with control group. Tirumalai hospital and K.V.M.Hospital were selected for conducting the study. Non-probability purposive Sampling technique was used. Total sample size was 60, among which 30 subjects were placed in experimental group and 30 subjects in control group.

The structured interview questionnaire was used to select samples with labour pain and standardized Visual Analogue Scale was used to assess the level of pain perception among parturients. The standard scale consisting of 4 questions, were “0” indicates “No pain” , 1-3 indicates “mild pain” , 4-6 indicates “moderate pain” and 7-10 indicates “severe pain” which detail the assessment of level of labour pain perception.

The responses were analyzed by using descriptive statistics (Mean, Standard Deviation, Frequency and Percentage) and inferential statistics (Dependent ‘t’ test, individual ‘t’ and chi-square). Discussion on the findings was arranged based on the objective of the study.

The first objective of the study was to assess the level of labour pain perception among parturients in experimental and control group. Among 30

Parturients, in Pre test, 02(07%) had moderate level of labour pain perception, and 28(93%) had severe level of labour pain perception in experimental group. (Table 2.1).

It also revealed that among 30 Parturients, in Pre test, 04(14%) had moderate level of labour pain perception, and 26(86%) had severe level of labour pain perception in control group.(Table 2.2).

The second objective of the study was to evaluate the effectiveness of effleurage in reducing labour pain perception among parturients in experimental group. The study findings revealed that among 30 parturients in pre test 02(07%) of them had moderate level of labour pain perception and 28 (93%) had severe level of labour pain perception. In post test 10 (33%) of parturients had moderate level of labour pain perception and 20(67%) had severe level of labour pain perception in experimental group.(Table 3.1).

It also reveals that among 30 parturients in pre test 04(13%) of them had moderate level of labour pain perception and 26 (87%) had severe level of labour pain perception. In post test 06 (20%) of parturients had moderate level of labour pain perception and 24(80 %) had severe level of labour pain perception.(Table 3.2)

Among 30 parturients in experimental group, the mean pretest was 7.83 with standard deviation of 0.95 was more than the mean post test was 3.9 with standard deviation of 0.73. The calculated mean difference was 3.93. The obtained ‘t’ value 21.97 which was highly significant at $p<0.05$ level. It is inferred that there is a significant difference between the pre and post test level of labour pain perception among parturients in experimental group.(Table 3.3)

Among 30 parturients in control group, the mean pretest was 7.60 with standard deviation of 0.89 less than the mean post test 7.40 with standard deviation 0.89 and the calculated mean difference was 0.2 and the obtained 't' value 1.29 was not significant at $p< 0.05$ level. It is inferred that there is a significant difference between pre and post test level of labour pain perception among parturients in control group. (Table 3.4)

Among 30 parturients in control group, the mean pretest was 7.60 with standard deviation of 0.89 less than the mean post test 7.40 with standard deviation 0.89 and the calculated mean difference was 0.2 and the obtained 't' value 1.29 was not significant at $p< 0.05$ level. It is inferred that there is a significant difference between pre and post test level of labour pain perception among parturients in control group. (Table 3.5)

Hence the stated hypothesis (H_1) that there will be significant difference between the mean pre & post level of labour pain perception among parturients in experimental group after effleurage therapy is accepted. The study finding revealed that there was a significant reduction in level of labour pain perception before and after effleurage therapy among experimental group.

The study finding is supported by the study conducted by Naghshin et. al., (2008) to determine the effect of effleurage massage on labour pain. Participants of this clinical trial study were 60 pregnant women having the inclusion criteria. Participants were randomly divided in to two groups of thirty, each . This procedure was done for thirty minutes. Labor pain of subjects was measured by visual analog

scale before and after the procedure. Results showed that reduction of labour pain by effleurage massage statistically significant<0.05)level.

The third objective of the study is to determine the association between the levels of labour pain perception among parturients with their selected demographic and obstetric variables in experimental and control group.

The study findings reveled that in experimental group , the type of induction and labour pain perception shows significant association in pre test. Hence the research hypothesis H_4 is accepted.

And there exists a nonsignificant association between pre test level of labour pain perception scores of parturients among experimental group with other selected demographic and obstetric variables such as age, education, occupation,family income, type of family, gravida, para and memberanes. Hence the research hypothesis H_4 is rejected.

The present study findings shows that there exists the significant association between membranes (ruptured or intact)and the post test level of labour pain perception among experimental group. Hence the research hypothesis H_4 is accepted.

And there exists a nonsignificant association between post test level of labour pain perception scores of parturients among experimental group with other selected demographic and obstetric variables such as age, education,occupation,family income, type of family, gravida, para and type of induction. Hence the research hypothesis H4 is rejected.

SUMMARY, CONCLUSION AND RECOMMENTATIONS

CHAPTER – VI

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with summary, conclusion, limitation and recommendations of the study. Further it includes implications for the nursing practice, nursing education and nursing administration, nursing research and recommendation for further research.

Summary of the Study

The aim of the study was done to evaluate the effectiveness of effleurage in reducing labour pain perception among parturients in selected hospitals at Pollachi. Study findings revealed that Effleurage massage is effective in reducing the level of labour pain perception among parturients.

The objective of the study was

- To assess the level of pain perception among parturients in experimental and control group.
- To evaluate the effectiveness of Effleurage on reduction in pain perception among parturients in experimental group.
- To determine the association between the level of pain perception among parturients with their selected demographic and obstetric variables in experimental and control group.

A quasi experimental pretest posttest with control group design was used to evaluate the effectiveness of Effleurage on reduction in pain perception among parturients.

Non probability purposive sampling technique was adopted to select the samples with inclusion criteria. Sample size was 60, among which 30 samples in experimental and 30 samples in control group were selected.

A standardized, interview questionnaire was used for the study. It consisted of II parts.

Part I : Dealt with the demographic and obstetric variables of parturients.

Part II : Visual Analogue Scale to assess the level of labour pain perception.

The content validity was checked by 10 experts, 7 OBG specialists, 2 Obstetritions and 1 Statistician. Data collection was done by using structured interview questionnaire. Pre test was done by using Visual Analogue scale to asses pain level for experimental and control group. Effleurage application was given during active phase (4-7cm) for experimental group by using palm of the hands in a circular motion for 30 minutes in between the contractions, without using any essential oils. Then the post test level of pain was assessed by Visual Analogue Scale to the experimental group immediately after the intervention and the control group after the routine care.

The collected data were analyzed by using both descriptive statistics (mean, frequency, percentage and standard deviation)and inferential statistics (dependent ‘t’ test, independent ‘t’ test and chi square) used to test the study hypothesis.

Major Study Findings

Major findings of the study are:

- With regard to level of labour pain perception among parturients most of them are under severe and moderate category.

- With regard to effectiveness of effleurage among parturients the mean post test score of pain was less than mean post test score and the obtained 't' value was 14.41 which was significant at $p<0.05$ level.

- With regard to the association between the levels of labour pain perception with their selected demographic and obstetric variables the study findings reveals that in pre test the type of induction and in post test the type of membranes among experimental group shows significant association with labour pain perception.

- In control group in post test the gravid and para shows significant association with level of labour pain perception and all the other selected demographic and obstetric variables doesn't shows any significant association between level of labour pain perception among parturients.

Conclusion

The main conclusion is drawn from the present study was that most of the samples during pre test had moderate level of pain perception (7%) and severe level of labour pain perception is about (93%). After providing effleurage massage for 30 minutes in between contractions during active phase of labour. The samples reduced

the labour pain perception during labour. The post test revealed the effectiveness of effleurage in reducing labour pin perception with a statistics of 't' value of 14.41* significant at $p<0.05$ level. Thus the investigator concluded the study with gret satisfaction in determining effleurage is cost effective, easy to apply not painful and can enhance comfort in mother during labour.

Implications of the Study

The implications were given on various aspects like nursing education, nursing administration, nursing research, nursing practice etc .

Nursing Practice

The result of this study has brought out certain facts that have far-reaching implications for nursing, particularly in the area of practice, education, administration and research.

- During labour most women is accompanied by much physical pain and emotional requiring special care in the form of the gentle touch , effleurage massage etc.
- Effleurage massage not only provides physical comfort but also conveys the message of caring , sympathy , love and reassurance.
- The nurse attending labour, by providing effleurage massage to the parturient woman can make this experience a pleasant and memorable one for the rest of the woman's life.
- The findings of the study can be utilized by practicing nurses in alleviating the suffering of women in labour.

Nursing Education

- Nurses with higher education and up-to-date knowledge will provide cost effective and quality client care.
- Nurse educators need to include non-pharmacological pain relief measures like back massage in the curriculum of basic nursing education as a part of intranatal care along with the physiology of labour and labour supportive techniques.
- In service education should be organized periodically to upgrade the knowledge and skills of healthcare professionals in various of back massage.

Nursing Administration

- Nurse administrator's need to facilitate the utilization of research based nursing care aspects in day-to-day practices to formulate policies and make necessary changes in health care delivery system.
- Make sure that the nurse patient ratio is adequate in labour room for rendering care such as effleurage massage.
- Supportive measures like effleurage massage should be taught so as to utilize it effectively either by the woman or supportive person during labour.

Nursing Research

- Nursing research focus on supportive care techniques such as effleurage massage, its provision and outcome of labour .

- The findings of the research need to be published so that the other members of nursing community can utilize such findings.

Limitations

- Intervention for two subjects were dropped out as they were taken for operative procedure due to delay in progress of labour.

Recommendations

On the basis of the findings of the present study, the following recommendations are drawn for future research.

- The study can be repeated on a larger scale.
- The study can be undertaken in different settings like Govt Hospital and PHC.
- A comparative study can be undertaken to evaluate the outcome of labour with provision of effleurage massage by a family member and health personnel
- A study can be undertaken to assess the attitude of the partner women and health professionals towards provision of effleurage massage during labour

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APPENDIX - A

Letter Seeking and Granting Permission to Conduct Study at Selected Hospitals at Pollachi.

ANNAI MEENAKSHI COLLEGE OF NURSING

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Fax : 0422 - 2676016
Email : ceandct@dataone.in
ceandct@gmail.com
Website: www.annaimeenakshi.in

Ref. No.

Date : June 18, 2011

To

Dr. Karnaki Marimuthu. M.B.B.S., D.G.O.,
Managing Director,
Thirumalai Hospital,
Pollachi.

Respected Sir,

Mrs. Sheeba S., is a student of M.Sc., (Nursing) II year from Annai Meenakshi College of Nursing, Coimbatore. She is conducting a study to assess the **"Effectiveness of Effleurage in Reducing Labour Pain Perception among Parturients in Selected Hospital at Pollachi".**

This is for her research work to be submitted to the Tamil Nadu Dr. M.G. R. Medical University in Partial fulfillment of the university requirement for the award of M.Sc., (Nursing) Degree.

As a part of her study she would like to collect the data from the Parturients mothers. Project will be furnished by the student personally. The norms, ethics and policies practiced in clinical setting will be followed by the student.

Thanking you,

Yours faithfully,

PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021.

We accept and allow me to do the work.

T. Kannaki Marimuthu

9/8/11.

Dr. KANNAKI MARIMUTHU, M.B.B.S., D.G.O.,
Reg. No: 41260
GYNAECOLOGIST & OBSTETRICIAN
THIRUMA[illegible]NTAL
POLLACHI - 642 001.

APPENDIX - A

Letter Seeking and Granting Permission to Conduct Study at Selected Hospitals at Pollachi.

ANNAI MEENAKSHI COLLEGE OF NURSING

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Ref. No.

Date : June 18, 2011

To

DR. ALLI. P
M.B.B.S. D.G.O
OBSTETRICIAN AND GYNAECOLOGIST
REG: NO: 31755
KVM HOSPITAL, POLLACHI

Respected Sir,

Mrs. Sheeba S., is a student of M.Sc., (Nursing) II year from Annai Meenakshi College of Nursing, Coimbatore. She is conducting a study to assess the **"Effectiveness of Effleurage in Reducing Labour Pain Perception among Parturients in Selected Hospital at Pollachi".**

This is for her research work to be submitted to the Tamil Nadu Dr. M.G. R. Medical University in Partial fulfillment of the university requirement for the award of M.Sc., (Nursing) Degree.

As a part of her study she would like to collect the data from the Parturients mothers. Project will be furnished by the student personally. The norms, ethics and policies practiced in clinical setting will be followed by the student.

Thanking you,

Yours faithfully,

PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021

Permission granted
Dr. P. ALLI M.B.B.S., D.G.O
OBSTETRICIAN & GYNAECOLOGIST
Reg. No: 31755

APPENDIX - B

Letter Requesting the Opinion of Experts on Content Validity of the Tool

ANNAI MEENAKSHI COLLEGE OF NURSING

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Requisition for Content Validity

Ref. No. Date : .....

From

Mrs. Sheeba S.
I - Year M.Sc(N)
Annai Meenakshi College of Nursing,
Coimbatore – 21.

Through
The Principal,
Annai Meenakshi College of Nursing,
Coimbatore – 21.

PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021.

To

Respected Sir/Madam,

Sub: Requisition for expert opinion and suggestion for content Validity of the tools – Reg.

I am a student of M.Sc., Nursing I year of Annai Meenakshi College of Nursing, Coimbatore, affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai. As a partial fulfillment of the M.Sc., Nursing programme. I am conducting **"A Study to Evluate the Effectiveness of Effleurage in Reducing Labour Pain Perception among Parturients in Selected Hospitals at Pollachi"**. I am hereby enclosing the following:

1. Statement and objectives of the study
2. Hypotheses
3. Methodology
4. Tool
5. Intervention
6. Content Validity certificate.

Herewith I am submitting the developed tool for content validity and for expert opinion and possible suggestion. It will be grateful to you and request you to return the same to the undersigned at the earliest possible.

Thanking you,

Yours faithfully,

Place: Coimbatore
Date:

APPENDIX – C

List of Experts Consulted for Content Validity

Dr.R.Radhika MBBS, DGO,

HOD-Obstetrics and Gynecology,

RK Hospital,

Coimbatore.

Dr.Kunthavi Devi MD, DGO,

HOD- Obstetrics and Gynecology

Abirami Hospital,

Coimbatore.

Asso.Prof.Mrs.Johnsy M.Sc (N),

HOD of OBG Dept, PSG College of Nursing,

Coimbatore.

Mrs.D.Charmini M.Sc (N),

Texcity College of Nursing,

Coimbatore.

Prof. Mrs.Renuka M.Sc (N),

HOD Maternity KMCH College of Nursing

Coimbatore.

Dr.Esther John M.Sc (N),Ph.D (N),
Principal, Ganga College of Nursing,
Coimbatore.

Asso.Prof.Mrs.R.Renuka M.Sc (N),
SRIMPS Collage of Nursing,
Coimbatote.

Mrs.Latha S.P M.Sc (N),
Principal, RVS College of Nursing,
Coimbatore.

APPENDIX - D

Structured Self Administered Questionnaire (English)

PART I

SECTION A: DEMOGRAPHIC VARIABLES

INSTRUCTIONS

1. Researcher has to read each one carefully and select the most appropriate statement by tick (√)

2. This information will be used exclusively for the purpose of research study and will be kept confidential.

Sample no:

Date :

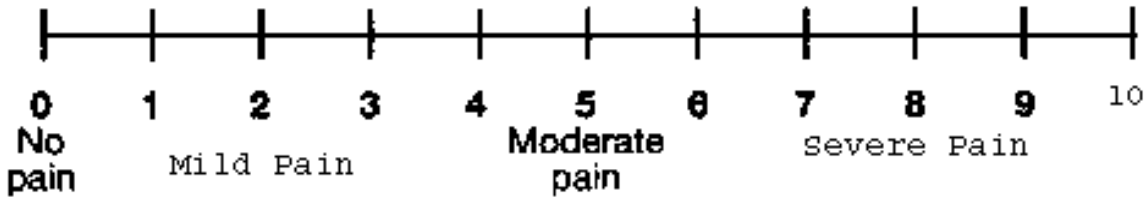
Information of baseline variable of client

S.NO	DEMOGRAPHIC VARIABLES	Score
1	Age in years a) Below 25 b) 26-30 c) 31-35	☐ ☐ ☐
2	Education (a) Primary (b) High School (c) Higher Secondary (d) Graduate	☐ ☐ ☐ ☐

3	Occupation a) Employed b) Unemployed	☐ ☐
4	Family income a) < 2000 b) 2001-3000 c) 3001-4000 d) > 4000	☐ ☐ ☐ ☐
5	Type Of Family (a) Joint Family (b) Nuclear Family	☐ ☐
6	Gravida a) Primigravida b) Multigravida	☐ ☐
7	Para a) Primipara b) Multipara	☐ ☐
8	Membranes a) Intact b) Ruptured	☐ ☐
9	Induction of labour done by a) Spontaneously b) ARM	☐ ☐

SECTION -B

VISUAL ANALOG SCALE



Score key:

Rate	Intensity	Score
0	None	
1-3	Mild	
4-6	Moderate	
7-10	Severe	

APPENDIX - F

Evaluation Criteria Rating Scale for Validation of Tool

Respected Madam/Sir,

Instructions:

Kindly review the items in the tool. If you are agree with the criteria, please place a tick mark in "RELEVANT" column otherwise place the tick mark in "NEED MODIFICATION" column or "NOT RELEVANT" and give your comments in the remarks column.

SECTION A: DEMOGRAPHIC VARIABLES

SL. NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
1.	Age in years				
2.	Education				
3.	Occupation				
4.	Family Income				
5.	Type of family				

Obstetric Variables

SL.NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
6.	Gravida				
7.	Para				
8.	Memberanes				
9	Type of Induction				

SECTION B: VISUAL ANALOG SCALE

SL.NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
1.					
2.					
3.					
4.					

Suggestions if any:

APPENDIX - G

INTERVENTION ON EFFLEURAGE

INTRODUCTION

Effleurage is the most basic massage movement and is often used as a linking movement with the client one movement while smoothly transferring from one movement or area of the body to the next. Effleurage is suitable for use any area of the body that would normally be massaged. Effleurage can also be performed by the laboring woman or by her partner/husband. Rhythmic slow circles are drawn with fingertips on the abdomen, thighs, arms.

MEANING

The word “Effleurage” is derived from the French verb “effleurer” which means “to stroke”, or “to skim over”. These translations are basically correct, but incomplete, descriptions of the effleurage technique used in massage.

DEFINITION

A mild massage technique consists of superficial manual movements moving away from the heart to encourage relaxation as well as deep manual movements towards the heart to aid circulation.[Joans Mosby Dictionary,].

IMPORTANCE/ ADVANTAGE

- An Effleurage movement helps to induce relaxation.
- Stimulating the nerves in the tissue.
- Stimulating Blood Supply to the Tissues.
- Relaxing Muscle Fibres'.
- Reducing Muscle Tension.
- Increased Cervical Dilation.
- Shortening the Duration of Labour.
- Reducing the intensity of pain.

PREREQUISITES FOR EFFLEURAGE

- Get a consent from the Authorities.
- Before starting intervention Oral and Written consent should be obtained from the parturients.
- High risk mothers such as PIH, Diabetic, Severe Anaemia, Heart Diseases etc should be avoided.

STEPS TO BE FOLLOWED

- Explain procedure.
- Provided desired position.
- Determine if client is comfortable with massage strokes.
- Adjust bed in a comfortable height.
- Close curtains around bed,

- Assume prone (or) side lying positions, sitting positions.
- Expose patients back and abdomen.
- Cover reminder of body with top sheet.
- Wash hands in warm water.
- Start the massage between contractions with an effleurage (long, gliding stroke).
- Apply hands first to sacral area massaging in circular motion.
- Stroke upward from buttocks to shoulders.
- Massage over scapulae with, smooth firm strokes.
- Continue in one smooth stroke from upper back to arm laterally along side of back down to iliac crests.
- Do not take the hands off from patients back till the end of the procedure.

After Care

- At the end of massage , provide comfortable position to the mother.
- Advice the mother to relax by taking slow, deep breaths.

APPENDIX - H

Evaluation Criteria Checklist for Validation of Intervention on Effectiveness of Effleurage in Reducing Labour Pain Perception

INSTRUCTION

The expert is requested to go through following evaluation criteria checklist prepared for validating the intervention on Effectiveness Of Effleurage In Reducing Labour Pain Perception Among Parturients In Selected Hospital At Trichy.

There are three columns given for responses and a column and facilitate your remarks in the remarks column given

INTERPRETATION COLUMNS

- Meets the criteria - Column I
- Partially meets the criteria - Column II
- Does not meet the criteria - Column III

SL.NO	CRITERIA	I	II	III	REMARKS
I.	CONTENT				
1.	SELECTION OF CONTENT				
1.1	Content reflects the objectives				
1.2	Content has up to date knowledge				
1.3	Content is comprehensive for the learning need of effleurage in labour mothers.				
1.4	Content provides correct and accurate information				
1.5	Content coverage				
2.	ORGANIZATION OF CONTENT				
2.1	Logical sequences				
2.2	Continuity				
2.3	Integration				
II.	LANGUAGE				
1.	Local language is used in simple and in understandable dialogues				
2.	Technical terms are explained at the level of learners ability				
III.	FEASIBILTY/PRACTICABILITY				
1.	Is suitable to the clients				
2.	Permit self learning				

3.	Acceptable to clients				
4.	Interesting and useful to clients				
5.	Suitable for setting				
IV.	ANY OTHER SUGGESTIONS				
	•				
	•				
	•				

APPENDIX - I

Content Validity Certificate

ANNAI MEENAKSHI COLLEGE OF NURSING

Affiliated with the Tamil Nadu Dr. M.G.R Medical University, Chennai.
Approved by the Indian Nursing Council, New Delhi &
Tamil Nadu Nurses and Midwives Council, Chennai.

Madukkarai Market Road,
P.B. No. 4431
Industrial Estate Post,
COIMBATORE - 641 021.

Phone : 0422 - 2675641, 2672705
Fax : 0422 - 2676016
Email : ceandct@dataone.in
ceandct@gmail.com
Website: www.annaimeenakshi.in

Ref. No.

Date : .....

Certificate of Validation

This is to certify that the tools developed by **Mrs. Sheeba. S.,** M.Sc (N) I - Year student of Annai Meenakshi College of Nursing, Coimbatore, Tamil Nadu (Affiliated to The Tamil Nadu Dr.M.G.R. Medical University, Chennai) is validated by undersigned and can proceed with this tool and conduct the main study for dissertation entitled **"A Study to Evluate the Effectiveness of Effleurage in Reducing Labour Pain Perception among Parturients in Selected Hospitals at Pollachi".**

Place: Coimbatore

Signature

Date:

Name and Designation

APPENDIX - J

CONSENT FORM

Respected Madam,

I am S.Sheeba , Iam doing my II year M.Sc (Nursing) in Annai Meenakshi Collge of Nursing , Coimbatore. Iam doing a research on the Effectiveness of Efflurage in reducing labour pain perception among parturients. I kindly request your co-operation to complete my research.

I assure you that your baby will not get any harm due to my research.

Iam Mrs…… I heard about the effectiveness of Efflurage Massage in reducing labour pain perception from S.Sheeba. She explained me about all the effects of Efflurage Massage. So I agree to participate in this research whole heartedly.

Yours Sincerely

Place:

Date:

APPENDICES

APPENDIX - A

Letter Seeking and Granting Permission to Conduct Study at Selected Hospitals at Pollachi.

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Phone : 0422 - 2675641, 2672705
Fax : 0422 - 2676016
Email : ceandct@dataone.in
ceandct@gmail.com
Website: www.annaimeenakshi.in

Ref. No.

Date : June 18, 2011

To

Dr. Karnaki Marimuthu. M.B.B.S., D.G.O.,
Managing Director,
Thirumalai Hospital,
Pollachi.

Respected Sir,

Mrs. Sheeba S., is a student of M.Sc., (Nursing) II year from Annai Meenakshi College of Nursing, Coimbatore. She is conducting a study to assess the **"Effectiveness of Effleurage in Reducing Labour Pain Perception among Parturients in Selected Hospital at Pollachi".**

This is for her research work to be submitted to the Tamil Nadu Dr. M.G. R. Medical University in Partial fulfillment of the university requirement for the award of M.Sc., (Nursing) Degree.

As a part of her study she would like to collect the data from the Parturients mothers. Project will be furnished by the student personally. The norms, ethics and policies practiced in clinical setting will be followed by the student.

Thanking you,

Yours faithfully,

PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021.

We accept and allow me to do the work.

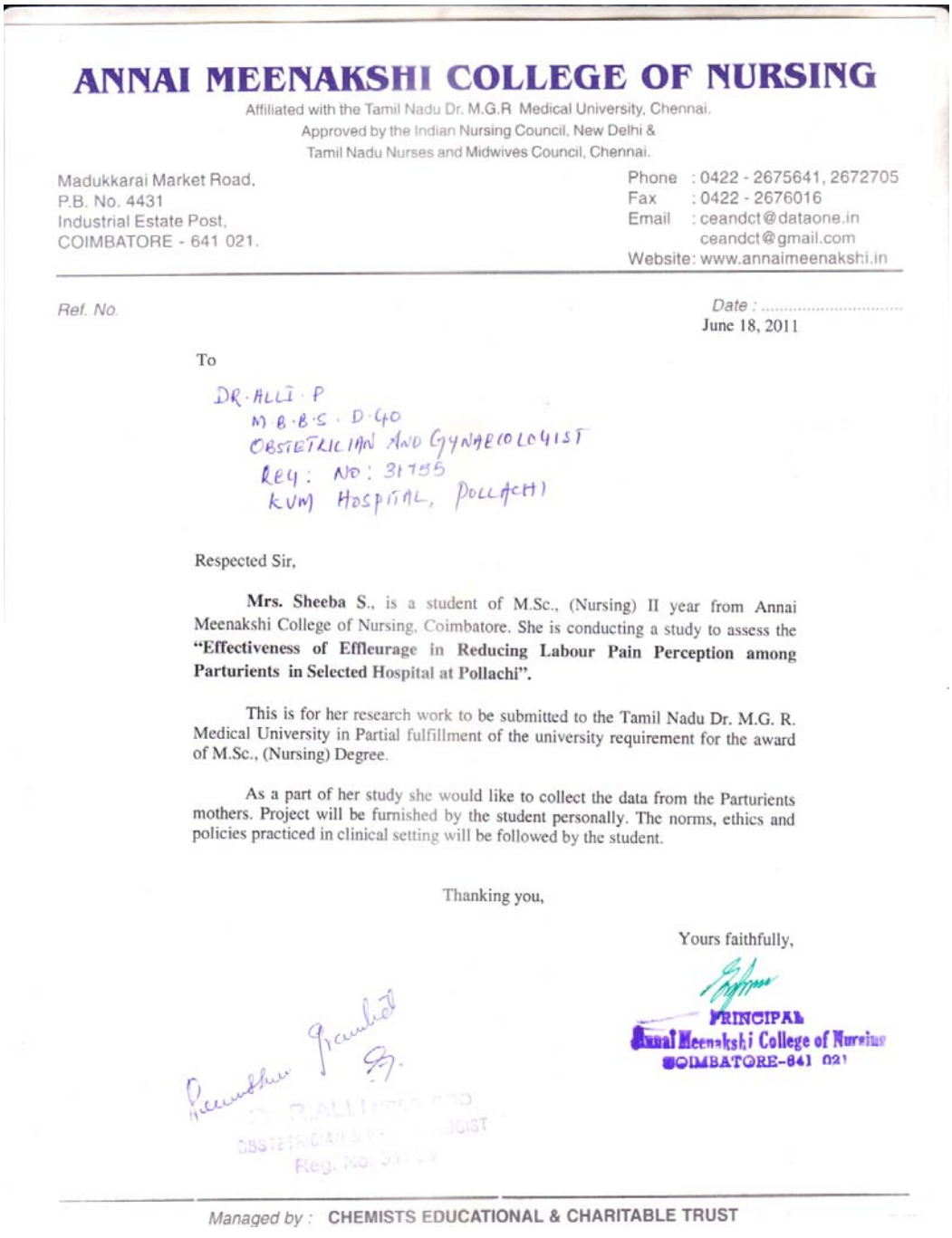
T. Kannaki Marimuthu

9/8/11.

Dr. KANNAKI MARIMUTHU, M.B.B.S., D.G.O.,
Reg. No: 41260
GYNAECOLOGIST & OBSTETRICIAN
THIRUMALAI HOSPITAL
POLLACHI - 642 001.

APPENDIX - A

Letter Seeking and Granting Permission to Conduct Study at Selected Hospitals at Pollachi.



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Email : ceandct@dataone.in
ceandct@gmail.com
Website: www.annaimeenakshi.in

Ref. No.

Date : June 18, 2011

To

DR. ALLI. P
M.B.B.S. D.G.O
OBSTETRICIAN AND GYNAECOLOGIST
REG: NO: 31755
KVM HOSPITAL, POLLACHI

Respected Sir,

Mrs. Sheeba S., is a student of M.Sc., (Nursing) II year from Annai Meenakshi College of Nursing, Coimbatore. She is conducting a study to assess the **"Effectiveness of Effleurage in Reducing Labour Pain Perception among Parturients in Selected Hospital at Pollachi".**

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Thanking you,

Yours faithfully,

PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021

Managed by : CHEMISTS EDUCATIONAL & CHARITABLE TRUST

APPENDIX - B

Letter Requesting the Opinion of Experts on Content Validity of the Tool

ANNAI MEENAKSHI COLLEGE OF NURSING

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Fax : 0422 - 2676016
Email : ceandct@dataone.in
ceandct@gmail.com
Website: www.annaimeenakshi.in

Requisition for Content Validity

Ref. No. Date : .....

From

Mrs. Sheeba S.
I - Year M.Sc(N)
Annai Meenakshi College of Nursing,
Coimbatore – 21.

Through
The Principal,
Annai Meenakshi College of Nursing,
Coimbatore – 21.

PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021.

To

Respected Sir/Madam,

Sub: Requisition for expert opinion and suggestion for content Validity of the tools – Reg.

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1. Statement and objectives of the study
2. Hypotheses
3. Methodology
4. Tool
5. Intervention
6. Content Validity certificate.

Herewith I am submitting the developed tool for content validity and for expert opinion and possible suggestion. It will be grateful to you and request you to return the same to the undersigned at the earliest possible.

Thanking you,

Yours faithfully,

Place: Coimbatore
Date:

APPENDIX – C

List of Experts Consulted for Content Validity

Dr.R.Radhika MBBS, DGO,

HOD-Obstetrics and Gynecology,

RK Hospital,

Coimbatore.

Dr.Kunthavi Devi MD, DGO,

HOD- Obstetrics and Gynecology

Abirami Hospital,

Coimbatore.

Asso.Prof.Mrs.Johnsy M.Sc (N),

HOD of OBG Dept, PSG College of Nursing,

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Mrs.D.Charmini M.Sc (N),

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Principal, Ganga College of Nursing,

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Asso.Prof.Mrs.R.Renuka M.Sc (N),

SRIMPS Collage of Nursing,

Coimbatote.

Mrs.Latha S.P M.Sc (N),

Principal, RVS College of Nursing,

Coimbatore.

APPENDIX - D

Structured Self Administered Questionnaire (English)

PART I

SECTION A: DEMOGRAPHIC VARIABLES

INSTRUCTIONS

1. Researcher has to read each one carefully and select the most appropriate statement by tick (√)

2. This information will be used exclusively for the purpose of research study and will be kept confidential.

Sample no:

Date :

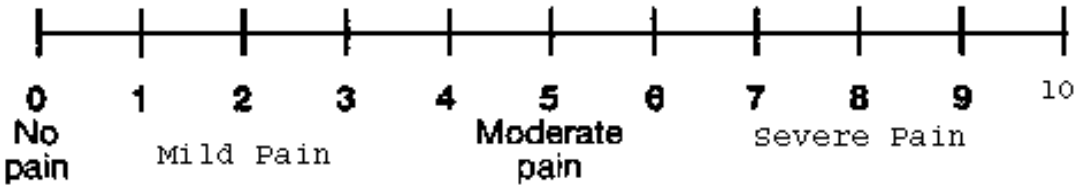
Information of baseline variable of client

S.NO	DEMOGRAPHIC VARIABLES	Score
1	Age in years a) Below 25 b) 26-30 c) 31-35	☐ ☐ ☐
2	Education (a) Primary (b) High School (c) Higher Secondary (d) Graduate	☐ ☐ ☐ ☐

3	Occupation a) Employed b) Unemployed	☐ ☐
4	Family income a) < 2000 b) 2001-3000 c) 3001-4000 d) > 4000	☐ ☐ ☐ ☐
5	Type Of Family (a) Joint Family (b) Nuclear Family	☐ ☐
6	Gravida a) Primigravida b) Multigravida	☐ ☐
7	Para a) Primipara b) Multipara	☐ ☐
8	Membranes a) Intact b) Ruptured	☐ ☐
9	Induction of labour done by a) Spontaneously b) ARM	☐ ☐

SECTION -B

VISUAL ANALOG SCALE



Score key:

Rate	Intensity	Score
0	None	
1-3	Mild	
4-6	Moderate	
7-10	Severe	

APPENDIX – E

Structured Self Administered Questionnaire

பகுதி I

தகவலாளர் பற்றிய விபரம்

மாதிரி எண் :

1. வயது (வருடத்தில்)

அ) 25க்கும் கீழ் ( )

ஆ) 26–30 ( )

இ) 31–35 ( )

2. கல்வித்தகுதி

அ) ஆரம்பநிலைக் கல்வி ( )

ஆ) இடைநிலைக் கல்வி ( )

இ) மேல்நிலைக் கல்வி ( )

ஈ) பட்டப்படிப்பு ( )

3. தொழில்

அ) வேலை செய்பவர் ( )

ஆ) வேலையற்றவர் ( )

4. குடும்ப வருமானம்

அ) 2000க்கும் குறைவாக ( )

ஆ) 2001 – 3000 ( )

இ) 3001 – 4000 ( )

ஈ) 4001க்கும்மேல் ( )

5. குடும்ப வகை

அ) தனிக்குடும்பம் ( )

ஆ) கூட்டுக்குடும்பம் ( )

6. கருவுற்றல்

அ) முதல்முறை கருவுற்றல் ( )

ஆ) பலமுறை கருவுற்றல் ( )

7. மகப்பேறு

அ) முதல்முறை மகப்பேறு ( )

ஆ) பலமுறை மகப்பேறு ( )

8. பனிக்குடச் சவ்வு

அ) முழுமையாக ( )

ஆ) பிளவுபட்டு (உடைப்பு) ( )

9. பிரசவ வலி தூண்டுதல்

அ) இயற்கையாக ( )

ஆ) செயற்கை முறையில் பனிக்குடச்சவ்வு உடைத்தல் ( )

APPENDIX - F

Evaluation Criteria Rating Scale for Validation of Tool

Respected Madam/Sir,

Instructions:

Kindly review the items in the tool. If you are agree with the criteria, please place a tick mark in "RELEVANT" column otherwise place the tick mark in "NEED MODIFICATION" column or "NOT RELEVANT" and give your comments in the remarks column.

SECTION A: DEMOGRAPHIC VARIABLES

SL. NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
1.	Age in years				
2.	Education				
3.	Occupation				
4.	Family Income				
5.	Type of family				

Obstetric Variables

SL.NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
6.	Gravida				
7.	Para				
8.	Memberanes				
9	Type of Induction				

SECTION B: VISUAL ANALOG SCALE

SL.NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
1.					
2.					
3.					
4.					

Suggestions if any:

APPENDIX - G

INTERVENTION ON EFFLEURAGE

INTRODUCTION

Effleurage is the most basic massage movement and is often used as a linking movement with the client one movement while smoothly transferring from one movement or area of the body to the next. Effleurage is suitable for use any area of the body that would normally be massaged. Effleurage can also be performed by the laboring woman or by her partner/husband. Rhythmic slow circles are drawn with fingertips on the abdomen, thighs, arms.

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A mild massage technique consists of superficial manual movements moving away from the heart to encourage relaxation as well as deep manual movements towards the heart to aid circulation.[Joans Mosby Dictionary,].

IMPORTANCE/ ADVANTAGE

- An Effleurage movement helps to induce relaxation.

- Stimulating the nerves in the tissue.
- Stimulating Blood Supply to the Tissues.
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- Reducing Muscle Tension.
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- Shortening the Duration of Labour.
- Reducing the intensity of pain.

PREREQUISITES FOR EFFLEURAGE

- Get a consent from the Authorities.
- Before starting intervention Oral and Written consent should be obtained from the parturients.
- High risk mothers such as PIH, Diabetic, Severe Anaemia, Heart Diseases etc should be avoided.

STEPS TO BE FOLLOWED

- Explain procedure.
- Provided desired position.
- Determine if client is comfortable with massage strokes.
- Adjust bed in a comfortable height.
- Close curtains around bed,
- Assume prone (or) side lying positions, sitting positions.
- Expose patients back and abdomen.
- Cover reminder of body with top sheet.
- Wash hands in warm water.

- Start the massage between contractions with an effleurage (long, gliding stroke).
- Apply hands first to sacral area massaging in circular motion.
- Stroke upward from buttocks to shoulders.
- Massage over scapulae with, smooth firm strokes.
- Continue in one smooth stroke from upper back to arm laterally along side of back down to iliac crests.
- Do not take the hands off from patients back till the end of the procedure.

After Care

- At the end of massage , provide comfortable position to the mother.
- Advice the mother to relax by taking slow, deep breaths.

APPENDIX - H

Evaluation Criteria Checklist for Validation of Intervention on Effectiveness of Effleurage in Reducing Labour Pain Perception

INSTRUCTION

The expert is requested to go through following evaluation criteria checklist prepared for validating the intervention on Effectiveness Of Effleurage In Reducing Labour Pain Perception Among Parturients In Selected Hospital At Trichy.

There are three columns given for responses and a column and facilitate your remarks in the remarks column given

INTERPRETATION COLUMNS

- Meets the criteria - Column I
- Partially meets the criteria - Column II
- Does not meet the criteria - Column III

SL.NO	CRITERIA	I	II	III	REMARKS
I.	CONTENT				
1.	SELECTION OF CONTENT				
1.1	Content reflects the objectives				
1.2	Content has up to date knowledge				
1.3	Content is comprehensive for the learning need of effleurage in labour mothers.				

1.4	Content provides correct and accurate information				
1.5	Content coverage				
2.	ORGANIZATION OF CONTENT				
2.1	Logical sequences				
2.2	Continuity				
2.3	Integration				
II.	LANGUAGE				
1.	Local language is used in simple and in understandable dialogues				
2.	Technical terms are explained at the level of learners ability				
III.	FEASIBILTY/PRACTICABILITY				
1.	Is suitable to the clients				
2.	Permit self learning				
3.	Acceptable to clients				
4.	Interesting and useful to clients				
5.	Suitable for setting				
IV.	ANY OTHER SUGGESTIONS				
	•				
	•				
	•				

APPENDIX - I

Content Validity Certificate

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Date : .....

Certificate of Validation

This is to certify that the tools developed by **Mrs. Sheeba. S.,** M.Sc (N) I - Year student of Annai Meenakshi College of Nursing, Coimbatore, Tamil Nadu (Affiliated to The Tamil Nadu Dr.M.G.R. Medical University, Chennai) is validated by undersigned and can proceed with this tool and conduct the main study for dissertation entitled **"A Study to Evluate the Effectiveness of Effleurage in Reducing Labour Pain Perception among Parturients in Selected Hospitals at Pollachi".**

Place: Coimbatore

Signature

Date:

Name and Designation

APPENDIX - J

CONSENT FORM

Respected Madam,

I am S.Sheeba , Iam doing my II year M.Sc (Nursing) in Annai Meenakshi Collge of Nursing , Coimbatore. Iam doing a research on the Effectiveness of Efflurage in reducing labour pain perception among parturients. I kindly request your co-operation to complete my research.

I assure you that your baby will not get any harm due to my research.

Iam Mrs…… I heard about the effectiveness of Efflurage Massage in reducing labour pain perception from S.Sheeba. She explained me about all the effects of Efflurage Massage. So I agree to participate in this research whole heartedly.

Yours Sincerely

Place:

Date:

APPENDIX - K

Letter Seeking Consent of Subject for Participation in the Study

சம்மதப் படிவம்

வணக்கம். நான் எஸ்.ஷீபா, தற்பொழுது அன்னை மீனாட்சி செவிலியர் கல்லூரியல் செவிலியர் பட்டமேற்படிப்பு இரண்டாம் ஆண்டு படித்துக் கொண்டிருக்கிறேன். நான் கர்ப்பினி பெண்கள் மத்தியில் பிரசவ வலியை உணர்தலை குறைப்பதற்கு ±·Ô·Ö§Ã·^ Á°¡^ எவ்விதம் உதவுகிறது பற்றிய ஓர் ஆய்வு செய்கிறேன். இதற்காக நான் தங்களது முழு ஒத்துழைப்பைகேட்டுக் கொள்கிறேன். மேலும் இதனால் தங்கள் குழந்தைக்கு எந்த ஒரு பாதிப்பும் ஏற்படாது என்பதை தெரிவித்துக் கொள்கிறேன்.

திருமதி. . . . . .என்கிற நான், திருமதி. எஸ்.ஷீபாஅவர்களின் ஆய்வுபற்றியும் அதன் விளைவுகள் பற்றியும் எனக்கு நன்றாக எடுத்துரைத்தார்.இதன்படி நான் இந்த ஆராய்ச்சிக்கு சம்மதம் தெரிவிக்கிறேன்.

கையொப்பம்

இடம் :

நாள் :